

Economics SAC Discipline Review

**Portland Community College
Submitted October 30, 2009**

The review of the economics discipline at Portland Community College (PCC) is based on discussions between the PCC economics SAC and the faculty in Portland State University's Economics Department, the PCC Business Department and other interested departments. It also includes an analysis of PCC institutional research data and student surveys of the economics faculty at PCC. This review summarizes economics as a discipline, identifies how the economics discipline helps the college achieve its mission, the core outcomes for our students, how we assess these outcomes, how economics fits into other programs at PCC and the 4-year university programs, the strengths of our program, the challenges we face, the goals we hope to achieve, and the resources that are needed from the college to help us improve the education we provide to our students.

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THE ECONOMICS DISCIPLINE

The popular consensus among economists would probably be that economics became a separate discipline in 1776 when Adam Smith's **An Inquiry into the Nature and Causes of the Wealth of Nations** was published. At that time, the study had been referred to as 'political economy.' In the 233 years since Smith's work was published, a multitude of ideas and theories have been created. All of these ideas and theories are attempts to explain how both individuals and society can, should, would or actually do deal with the problem of scarcity. Since the beginnings of modern man, individuals and groups have always dealt with scarcity. But the study of economics is an attempt to have people deal with scarcity in a reasoned and reasonable manner (as opposed to brute force). Economics as a discipline deals not only with the mechanics of supply and demand, profit-maximizing behavior and finance, but also with social issues such as crime, the environment, education, income distribution, and more. Economics is very much a social science because it studies human behavior. However, economists often use mathematical models and statistics to try to explain and predict human behavior and to inform the public about the state of the economy. Economics is often referred to as the dismal science because of the basic premise that there are not enough resources to satisfy all of humanity's wants.

When the economy is humming along at full-employment and low inflation, most people tend not to think much about the study of economics. However, in tumultuous economic times, economic statistics and theories become daily news features. This generates more interest in economics as a discipline, and more criticism of economists as a whole.

1. THE ECONOMICS DISCIPLINE GOALS AT PCC

A. Our Economics Mission and Goals

Our mission is to increase economic literacy. The overriding goal of the economics faculty at PCC is two-fold. One goal is to help students learn to think more like economists. That is, to understand our vocabulary and to make rational decisions based on a critical analysis of the marginal benefits and the marginal costs of their potential choices so they can more effectively participate in the economy as consumers, workers and voters. Our other goal is to prepare students for their continuing studies, whether those studies include additional economics courses or not. In our lower-division core courses, we teach economic history, terminology, basic concepts and theories. We boost critical thinking and analytical skills and students' ability to understand contemporary issues via an increased literacy of economic news and arguments. Basic economic terminology, theories and models are introduced and applied to contemporary issues in all of our courses. We do not teach upper-division courses with advanced economic theory or models. Our student body is composed mostly of general education students, students who are required to take our courses for other programs, and two-year transfer students. A smaller portion of our students move on from PCC to take upper-division economics classes, or take our courses out of general interest. These goals have not changed since our last review in 2004 and we do not anticipate a change in these basic

goals within the next 5 years. What has changed is the amount of discussion among faculty that centers on how to achieve these goals.

Our Economics Statement of Values

1. The economics discipline helps students to achieve their personal goals by educating them about how they fit into the economy as workers, consumers and voters.
2. The economics discipline helps students to achieve their professional goals by helping them to acquire the analytical and critical thinking skills that will help them to pursue their careers.
3. The economics discipline helps students understand the changing global economy with topics such as economies of scale, international division of labor and comparative advantage (the theories upon which international trade is based) as well as international institutions, policies, treaties and currency exchange regimes. With an understanding of these ideas and institutions, students can make better career choices that will help them adapt to changes in the global economy.
4. The economics discipline teaches students economic concepts and theories and develops their critical thinking and analytical skills so they can engage in debates about contemporary socio-economic issues with fact-based arguments.
5. The economics discipline pursues the efficient use of scarce resources by making use of electronic and internet resources whenever possible – within traditional classroom-based courses, as well as by making courses available on-line.
6. The economics discipline strives for continuous improvement in classroom and on-line learning environments by utilizing computer technologies and a variety of internet resources in the classroom (including the on-line classroom), by creating assignments that require student use of computer technology and internet resources.
7. The economics faculty participates in and attends local forums and lectures to stay abreast of changing economic conditions and to help spread economic knowledge beyond the PCC classroom.
8. The faculty meets with our peers in other colleges and universities to be certain that our curriculum matches that of other Oregon institutions.
9. The faculty meets with other departments within PCC to be certain that our discipline is meeting their needs and expectations.

B. The College Mission, Values and Goals

PCC's mission is to "provide education in an atmosphere that encourages the full realization of each individual's potential" and "offer opportunities for academic, professional, and personal growth to students of all ages, races, cultures, economic levels, and previous educational experiences." (See Appendix 3) The College values learning that facilitates the attainment of personal and professional goals and prepares students for their role as citizens; the collaborative, sustainable, effective and ethical use of resources; the dignity and worth of individuals; fostering an environment where faculty and students feel safe discussing ideas; and the importance of accountability based on outcomes. PCC's goals include making education accessible, promoting student success, a

commitment to diversity, continuous improvement, developing partnerships and providing leadership to the community.

The Economics SAC strives to fulfill this mission and shares these values and goals. The reason is simple: As economists, our goal is the efficient allocation and use of scarce resources. As students learn about economics, they will become more productive workers, better prepared to deal in the marketplace as consumers, and able to make better decisions as voters. Students will also be informed about how their career choices will affect their incomes. As economists, we understand the need for the sustainable and efficient use of college resources, the need for accountability, and the inefficiencies caused by discrimination perhaps better than any other discipline.

We, as a discipline and SAC, are dedicated to:

- Encouraging students to understand their roles in the economy and to reflect upon how their actions impact the market, their communities, and the sustainable, ethical and efficient use of resources
- Helping students to understand and be able to distinguish the difference between needs and wants; especially the opportunity costs involved in choosing among competing wants
- Helping students gain the ability to more fully understand what they are reading or listening to from the media about the macro economy (unemployment, inflation, monetary and fiscal policy, etc)
- Providing students with challenging educational material that fully utilizes their academic skills and pushing those skills to a higher level
- Requiring students to complete assignments that utilizes and/or furthers their ability to utilize media and technology
- Training students to think critically and form well-considered conclusions to be better participants in the political process as citizens
- Offering courses in a variety of formats (classroom, web, TV-web, classroom-web), six days per week, in all time slots, at all 3 campuses and 2 centers.

Several faculty members provide leadership and volunteerism in their communities. Some examples include:

- Jim Eden – Has lectured and co-chaired the “Great Decisions” discussions at Multnomah Community Center
- Youassef Khodaparast is a regular guest speaker on the local public radio KBOO Persian program covering Oregon, national, and international economies. He is also actively involved within the Iranian-American community of Portland in creating better cultural ties between Americans and Iranian expatriates.
- Joel Magnuson gave a four-part lecture series to seniors at the Portland Oasis. The lecture series was on the economic crisis of 2008-2009. He has published a text and several articles, and does radio and documentary film interviews, speaking engagements and conference presentations throughout the United States and Europe. (Attended and presented at the "Buddhist Economics Research Platform Conference," July, 2007, Budapest, Hungary; the "Association for Heterodox Economics Conference," July, 2008, Cambridge England; the "Sustainable

- Business: Why Should We Care Workshop," August, 2008, Nagykovasci, Hungary; "Local-Fest: Creating Sustainable Community," Boulder Public Forum and Business Expo, Boulder, Colorado, July 11, 2009; Forthcoming: *Will attend and present at the Parkland Institute Fall Conference, "Crisis and Opportunity: It's Time for a Progressive Economy," November, 2009, Edmonton, Alberta, and the annual DEBT Conference at the Center for 21st Century Studies, Madison, Wisconsin, April 30-May 1, 2010.)
- Patricia Atkinson – Business owner in the automotive industry since 2004
 - Bill Beebe has served six years on the city of Portland's Planning and Transportation Advisory Commissions, was a member of the Lake Oswego Planning Commission, and was a member of Washington County's Cable Advisory Committee. Currently, he is a member of an Economics Roundtable, which meets quarterly to discuss the economy for real estate and financial professionals.
 - Rhonda Collier regularly volunteers at both of her children's schools: Franciscan Montessori Earth School and the Creative Science School.
 - Nancy Scott is a member of the City of Beaverton's Board of Design Review and the American Diabetes Association Gala Auction Committee.
 - Norman Solomon serves as the Director for the Lakeridge and Wilsonville Family History Centers (genealogical research facilities).

2. THE ECONOMICS CURRICULUM AT PCC

The economics SAC develops, approves, and revises all course outcomes and assessments to meet college-level standards and economics department goals, and in alignment with PCC's mission, values and goals. Because we are a Lower Division Transfer department, the economics SAC consults with economics faculty at other community colleges and four-year colleges and universities in Oregon to be sure that our course sequences, and course content align with state standards and transfer schools' articulation requirements. This relationship is particularly close with the Portland State University Economics Department. Because economics courses are required for students in other PCC programs, we also consult with faculty in those departments to be certain that our courses are providing the course content and level of rigor that is anticipated by those programs.

A. National discipline guidelines

There are no official national economics course guidelines. However, at the introductory (college sophomore) level, there are generally accepted course subdivisions. The most universal ones are microeconomics and macroeconomics. There are numerous courses and textbooks available that follow this division at not just the introductory level, but also at the intermediate and advanced level. This has been the case for many decades and it is not likely to change in the next several decades. The core theories that are covered at PCC in introductory microeconomics (EC201) and macroeconomics (EC202) are the same at virtually any college or university in Oregon, in the USA, and around the world.

What does vary is the depth of coverage of those theories and how those theories are related to current events. Another variable is the variety of other courses that are available in economic history, international economics, and economic issues. Because of the diversity of approaches in teaching economics and the variety of economic issues, there is little in the way of standardization of what is offered at various colleges and universities around the US. However, one would find that the theories covered in a sophomore-level international economics course would be close to the same at most institutions. Likewise, most courses that cover economic history will include the contributions of many of the same economic philosophers. The greatest variety will be found in courses that cover contemporary issues. Since those issues are always changing, economics issues courses will change as well.

The closest thing we have to a national standard is perhaps the *Test of Understanding of College Economics* by William B. Walstad and Ken Rebeck. This test is now in the 4th edition. The first edition was developed over 40 years ago and was made available for use by introductory college economics teachers and researchers. Revising this exam and making it available is a joint effort of the American Economic Association and the National Council on Economic Education. This exam has two parts. One part covers microeconomics and the other part covers macroeconomics. It has been reviewed and discussed by the SAC. The questions in this exam cover the same material and are similar to the exams in use by PCC economics faculty. The exam is available for use by PCC faculty and has been used on occasion in the past at PCC.

What we do know, from conversations with Portland State University economics faculty and from reading syllabi at various colleges and universities in Oregon, is that the PCC economics curriculum closely matches what is being taught at the sophomore level across the nation.

B. Identify any changes to the Course Content and Outcomes since the last review

Some changes were made to the CCOGs since our last review in 2004 to improve the clarity of the outcomes and assessments. During this review process, we again went through each CCOG. For the most part, those changes were relatively minor and were made to improve the wording in the guides, rather than a change in the actual course material. In addition to those wording changes, there has also been increased discussion of and focus on outcomes as we teach our courses. The substantial change was to add a new course. That is EC285, Introduction to Political Economy. (See appendix 4 for the current CCOGs.) One discovery that came about as a result of this review process is that the CCOGs as posted on mypcc contained several errors. So, correction of those errors is one of the results of this particular review process.

While the content and outcomes vary from one course to another, there is a consistent theme in the outcomes. That is that students emerge from our courses with the ability to analyze and understand social issues, institutions and government policies. We utilize a wide variety of current issues to demonstrate how an understanding of economic principles facilitates student analysis and understanding of those issues. We have

integrated the course outcomes into our diverse teaching strategies and techniques and make students aware of those outcomes.

C. Assessment of Course Outcomes

The following is contained in the economics CCOGs: “Traditional and nontraditional techniques will be used to assess student mastery of the content, competencies, and outcomes. These techniques can assess either products or processes:

Products: multiple choice exams, essays, individual or group projects, student demonstrations, research projects, other projects with specified rating criteria, and portfolios.

Processes: interviews, documented observations, web searches, journals, student self-evaluations.”

This description of assessment gives each faculty member the opportunity to create and vary their assessment techniques. These techniques and their results are shared among the faculty at SAC meetings. Some of the commonalities include:

- The use of multiple choice exams that make use of texts’ test banks to ascertain student comprehension of economic theory
- Writing assignments that require students to read and review newspaper or journal articles to assess their understanding of the economics of contemporary issues
- Research projects that require students to locate economic statistics on the internet and either utilize or explain the meaning of the statistics
- The use of student journals wherein they keep track of current economic conditions, government policies, socio-economic conditions, political-economic debate, etc
- Class discussions of films, readings, newspaper articles, etc
- Group problem-solving in class or on-line with faculty “hovering” and listening as students discuss and compare their results
- Student presentations of economic theory, articles, or research
- The use of student surveys to find out what works and what doesn’t in terms of facilitating or impeding student learning

The evidence of whether students are meeting course outcomes is found in the results of their exams, essays, projects, conversations, presentations, etc as outline in the above list. Other, more informal (unwritten and unrecorded) feedback from students that allows us to gauge their learning is by the questions they ask. One of the best informal measures is their responses when they are asked if taking an economics course means they now understand what they are reading or hearing from their media sources. Their answers are nearly always a look of satisfaction on their faces and an emphatic ‘yes.’ Some students even go on to state that they now feel confident enough to engage in policy debates with their peers.

Because a consistent theme in our course outcomes includes a better understanding of current issues/economic conditions and those issues/conditions are always changing, the particulars of our assessments must also change. We teach students economic principles

and theory and then apply that theory to the ever-changing list of current economic issues.

As we listen to students try to solve problems, present their reading or research findings, and participate in discussions, we are able to gauge whether or not they have grasped particular economic concepts. By having students work these problems and make presentation in class or on-line, we can alter the pace, speeding up or backtracking as needed.

Sample assignments are included in Appendix 12.

D. PCC Core Outcomes

The following section lists the PCC core outcomes and how the economics faculty works to incorporate attainment of these outcomes in our courses. Our Core Outcomes Mapping Matrix (in Appendix 7) Mapping Level Indicators are at levels 3 (basic demonstration and application of knowledge and skills) and 4 (demonstrated comprehension and is able to apply essential knowledge and skills) for these Core Outcomes in almost all cases.

Graduates of Portland Community College should be able to:

- ✓ **Communicate** effectively by determining the purpose, audience and context of communication, and respond to feedback to improve clarity, coherence and effectiveness in workplace, community and academic pursuits.

In all of the economics courses, we require various types of writing assignments. Some of these are short essays as part of an exam. Other writing assignments are done outside of class, many requiring a research component. In addition to learning the economic content, students must be able to effectively communicate what they have learned in these writing assignments if they are to successfully complete their economics coursework. Some courses/instructors require students to give oral presentations and/or participate in class discussions. In all courses, students must communicate with each other in small groups to solve problems. Faculty are able to monitor these groups, both in the classroom and in discussion board posts that accompany on-line sections.

- ✓ Demonstrate **community and environmental responsibility** by applying scientific, cultural and political perspectives to natural and social systems and use an understanding of social change and social action to address the consequences of local and global human activity.

EC200, 201, 203 and 285 examine the positive and negative externalities that result from human activity. Both environmental and neighborhood externalities are examined. Students learn what an externality is, how the benefits and costs of such externalities might be measured, how these externalities affect efficiency, and potential solutions to deal with these externalities. Faculty use the previously mentioned techniques to ascertain student comprehension: Exams, writing assignments, small-group problem solving, class discussions and projects.

- ✓ Use their **critical thinking and problem-solving** skills to identify and investigate problems, evaluate information and its sources, and use appropriate methods of reasoning to develop creative and practical solutions to personal, professional and community issues.

Marginal analysis is introduced as the economist's tool of choice when it comes to problem-solving. Critical thinking, asking questions, researching information, considering a variety of possibilities, and the use of formulas are in everyday use in the economics classroom. All economics courses present mathematical models that utilize equations and graphs. There is a substantial amount of problem-solving in all economics courses. Students routinely demonstrate their ability to identify/calculate opportunity costs, real versus nominal GDP, inflation and unemployment rates, tax rates, marginal revenues and marginal costs, and the list goes on. In EC202 students commonly locate macroeconomic data and use that data to evaluate economic performance. Assignments require students to read, review, analyze and critique articles concerning contemporary issues. Students must use both critical thinking and problem-solving skills to successfully complete all of our economics courses.

- ✓ Exhibit **cultural awareness** and use an understanding of the variations in human culture, perspectives and forms of expression to constructively address issues that arise out of cultural differences in the workplace and community

In all of our economics courses, we have a variety of opportunities to ask students to contemplate cultures other than their own. In EC200, we examine the history of economic thought. This opens many students' eyes to cultural viewpoints, institutions and philosophies that most have not been exposed to. EC200, 201, 202, 203 and 230 all have at least some coverage of comparative advantage and the benefits of international trade, as well as the down-sides to isolationism and discrimination. In EC216 and 285, a significant amount of time is spent examining race, gender, discrimination and the influence of institutions on economic choices.

- ✓ Show **professional competence** by demonstrating and applying the knowledge, skills and attitudes necessary to enter and succeed in a defined profession or advanced academic program

In all of the economics courses, students are required to improve skills that nearly all employers are looking for. Research projects require students to find information on the internet from credible sources. The use of word-processing and/or spreadsheet programs, writing papers, using math, regular attendance, and project completion are all activities that are expected of economics students and a professional, 21st century workforce.

- ✓ Assess, examine and **reflect** on one's own academic skill, professional competence and personal beliefs and how these impact others.

By providing frequent and honest feedback to students, we try to give students a "reality check" on their progress in learning and improving their skills. Through the use of web-sites with simulations, problems, and quizzes, students are able to obtain instant feedback about whether or not they are learning as they should.

E. Distance Learning Course Offerings

Multiple sections of EC200, 201 and 202 are offered on-line every quarter. Those sections are popular and typically fill rather quickly. EC285 will become available on-line. Instructor concerns center around the following issues:

1. Exams being given on campus and requiring students to display photo identification to be assured that the registered student is the student actually performing the work, learning, and gaining college credits.
2. Class size: How minimum and maximum class sizes are determined. At what point are there enough students on a waiting list that a second class could be offered? If an instructor accepts additional students over a cap, should there be overload pay? Should there be a consistent policy district-wide that applies to all disciplines?
3. Inconsistencies in quality and rigor across disciplines lead to inconsistent student expectations.
4. Administrative and software support is lacking.

F. Curricular changes to Address College Initiatives

- **Service-learning:** Currently, there are no Service-Learning opportunities in economics courses.
- **Internationalization:** Economics courses have always contained an 'internationalized' curriculum. We address the positives and negatives of international trade, protectionism, international institutions and international trade agreements in EC200, 201, 203 and 230. International balance of payments and finance is included in EC202. Developing economies, their accomplishments and struggles are discussed in EC200 and 230. Many international trade issues are a part of EC203. EC216 covers international gender issues and EC285 covers international institutions and their history.
- **Inquiry-based learning:** All of our courses foster dialog within which student inquiries are explored during class discussions. This is true with both traditional and on-line courses.
- **Sustainability:** Joel Magunson created a new course, EC285: Introduction to Political Economy. This course studies the United States economy from a systems/institutional perspective. Sustainability issues are a part of EC285, which was developed in response to a request from the Environmental Studies program. Sustainability can also be included in EC203, depending on instructor preferences.

3. NEEDS OF STUDENTS AND THE COMMUNITY: How does the economics discipline meet these needs and are these needs changing?

A. Effect of student demographics on instruction

Reviewing 2007/08 data on gender, race, age and degree status shows that economics students differ from general lower division transfer (LDT) students in much the same way as they did in our last review. However, the degree of those differences has increased substantially.

When it comes to race both economics and LDT saw an increase in minority students between 1998 and 2008. Economics had a greater percentage of minority students as compared to LDT in 2008 (28.5% vs. 26.6%). Economics also had a greater percentage of minority students than did LDT in 1998, but we experienced a faster rate of increase in minority students over that 10 year time frame (a 7% increase for economics vs. a 3% increase for LDT). In the percentage of students that are degree-seeking, economics students are moving in the same direction as LDT students, but again at a faster pace. In 1998, economics students were more likely to be degree-seeking (81.22% compared to 77.7 for LDT), but by 2008 that difference was even more pronounced (91.2% vs. 81.8%).

In other demographics, economics students are moving in the opposite direction from LDT students as a whole. Economics continues to have a lower female/male ratio (43.9%/56.1%) than LDT (58.2/41.8). Since 1998 economics students' female representation decreased by 10.5%, while LDT female representation increased by .7%. Economics students' age distribution is also moving in the opposite direction of LDT students. Between 1998 and 2008, we saw an increase in the percentage of students in the 18 to 30 year age group (from 80.1 to 82), while LDT saw a decrease in the percentage of students in that age group (from 73.9 to 68.3). We are also going in the opposite direction from LDT in the percentage of students that are degree seeking. In 1998 51.7% of our students were full time, but by 2008 60.4% were. In 1998 50% of LDT students were full time, but by 2008 only 43.1% were. In summary, economics students are mostly full-time, degree-seeking, males between 18 and 30 years old. And while they are mostly white, they are more likely to be part of a racial minority than other LDT students.

What effects do these demographics have on instruction? The variety of backgrounds, academic skills and learning styles make instruction more challenging and more interesting. In-class problem-solving and discussion groups facilitate student interaction. When discussing economic issues and policy, students from diverse backgrounds can share a variety of experiences and make the discussions more comprehensive and more interesting. For example, students who were not born in the U.S. often choose to report on economic problems in their country of origin in research and class sharing projects. This creates opportunities to either demonstrate the universal applicability of some economic principles or understand impacts of globalization. Students learn more and explore other viewpoints when exposed to this variety. Students working problems

together often discover that their gender, racial and age differences are unimportant. It is their differing math skills that are important.

B. How feedback from students, the PCC business department and Portland State University has been used to make changes to curriculum or instructional methods

Textbooks: Students frequently voice concern about the price of textbooks. Many faculty members have worked with publishers to create custom books that lead to substantial savings. Others have experimented with electronic text alternatives. We discuss textbook choices and costs at every SAC meeting. Information on quality, price, supplements and delivery options is shared so that each faculty member can make the text choice they feel is best for their students.

Student Evaluations: We use class discussions, assignments, formal evaluations and informal conversations to obtain feedback from students about what helps them to learn the best. We revise our assignments, course materials and assessments as needed to improve student learning. The most frequent student comments center around their increased ability to understand economic policy, data and reports in the news. (See Appendix 11 for a sampling of student comments.)

The overwhelming majority of our students are seeking an associate degree from PCC. Many are planning to transfer to a 4-year institution (most commonly Portland State University). The most common associate degrees are the Associate of Science Oregon Transfer (ASOT), Associate of Arts Oregon Transfer (AAOT), and the Associate of Applied Science (AAS) in Accounting, Marketing, and Management. While the ASOT students are planning a variety of majors, many of our students are working toward an ASOT in Business. Other economics students are working toward degrees in aviation, engineering, education, and pharmacy. Because the majority of our students are headed toward careers in business, accounting, management and marketing, and many are headed to Portland State University, we decided to meet with faculty in those areas.

We asked the PCC Business Administration faculty why they require economics courses, what they want students to learn, and whether they are satisfied with the job we are doing. We learned why they require EC201 and EC202 for some students, and why other students are required to take EC200. We were told of particular topics that they want us to cover (comparative advantage, international trade, tax policy, fiscal policy). We also learned they want the economics faculty to improve students' critical thinking, reading and writing skills. They want us to require a certain (higher) level of rigor than some students are accustomed to. We were told that we are doing a good job of preparing students to move forward in their programs. They are very happy with us and feel that we have a cordial relationship with the Business Administration faculty.

We also met with the SAC chair of the Political Science and Peace & Conflict programs to find out what they want students to learn in their economics courses. All of the topics on their list are covered in our courses.

Meetings with faculty for Environmental Science uncovered the fact that the EC201 course they were requiring didn't provide the economics material they wanted their students to learn. A new course, EC285 was created in part to cover material for these students.

We met with the economics department chair and another faculty member at Portland State University. Both of them do a "fair amount" of transcript evaluation of transfer students. They also recall having PCC transfer students in their upper-division economics courses. Neither reported PCC students performing any better or worse than students that had taken their introductory economics courses at PSU. We spent some time discussing the depth of coverage of particular topics in the 200-level courses at PSU and their prerequisites for upper-division courses. In summary, we are confident that our curriculum is in line with the PSU curriculum. The PSU economics department feels we are adequately preparing students for upper-division coursework.

C. Current & projected demand & enrollment patterns and adjustments that will be necessary

Enrollment in economics has increased. Most of this increase has been at the Cascade and Rock Creek campuses and in distance courses. That enrollment growth is expected to continue due to the expansion of facilities at those two campuses and the popularity of distance learning. Between fall term 2005 and fall term 2009, there has been an increase in the number of economics sections and a shift in the locations of those sections. There are two more sections at both Cascade and Rock Creek, one less section at Sylvania, no change at Southeast and Hillsboro, and an increase of three distance learning sections. The total number of sections increased from 32 to 36.

For nearly the past two decades, there had been no change in the number of full time faculty positions in economics. There had been no full-time faculty positions at Cascade campus, four full-time faculty positions at Sylvania campus and one full-time faculty position at Rock Creek campus. To adjust for the enrollment increase and shift and due to budget realities, the decision was made to move one of the Sylvania full-time positions to Cascade, rather than to add to the faculty. This position was scheduled to be moved to Cascade fall term 2008. This move was delayed until winter term 2009. However, the person in that position retired has not been replaced. Due to budget issues, the funds for that position were used elsewhere. At this point, we have a 12.5% increase in section offerings, and a 20% reduction in full-time faculty, meaning that the economics department has increased reliance on part-time faculty and decreased the full-time/part-time ratio. With the position at Cascade unfilled, the majority of economics courses are now being taught by part-time faculty. Additionally, there are no economics tutors available for students.

As enrollment increases at Cascade and Rock Creek campuses continue, filling the full-time position at Cascade campus and adding a second full position at Rock Creek will be necessary to provide student access to a quality economics education.

D. Strategies to facilitate access & diversity

Economics courses are offered throughout the day and evening, six days per week at all three campuses, Southeast Center and Hillsboro Education Center. Courses are also offered on-line. We also make use of Blackboard and mypcc to post syllabi, assignments, course materials and to encourage student discussions. The economics faculty welcomes students of all backgrounds.

4. THE ECONOMICS FACULTY AT PCC

A. Faculty

i. Size and distribution of faculty: Currently, there are four full-time and ten part-time faculty. Of the full-time faculty, three are at Sylvania, one is at Rock Creek, and there is an open position at Cascade. Several of the part-time faculty members teach at more than one campus.

ii. Quantity & quality of faculty needed to meet the needs of the department: To meet the needs of students, we recommend filling the full-time position at Cascade and adding a second full-time position at Rock Creek.

iii. Faculty turnover and changes anticipated for the future: One of the full-time faculty members retired at the end of 2008. That position was moved to Cascade campus and has not been replaced. There are no additional retirements planned in the near future.

iv. Reliance on adjunct faculty & how the background & experience of PT compares to FT: The current full-time to part-time ratio (in terms of the sections being taught) is 42% to 58%. This is the highest that it has been in the memories of the current faculty members. The ten part-time faculty members' educational backgrounds match that of the full-time faculty. Those ten individuals have a cumulative total of over 150 years of experience teaching economics. The part-time faculty members bring a variety of other occupational experiences with them, including: the automotive industry, Bonneville Power Administration, Northwest Natural, the commercial insurance industry, economic research firms, the petro-chemical industry, the American Red Cross, transportation and corrections agencies.

v. Faculty diversity & cultural competency: Of the four full-time faculty, three have spent time living in other countries. Before coming to PCC, Jim Eden taught for three and a half years in Borneo; his students were Malay and Chinese. While in South East Asia Jim traveled extensively—East and West Malaysia, Singapore, Thailand, and Hong Kong. While at PCC, Jim participated in a one year exchange in the UK. During that time he taught mainly South Asian students. Youssef Khodaparast is from Iran. Joel Magnuson lived and taught in China. Bill Beebe spent time living in Germany, Spain and Greece. Of the part-time faculty members, half are women. Many have spent a considerable number of years working in the private sector or in other government sector employment. They bring a variety of experiences to the classroom.

vi. Faculty involvement in campus activities and committees:

James Eden - Assisted in the hiring interviews of part-time economics instructors and served as SAC chair

Youssef Khodaparast – Has participated on the EAC, on faculty hiring committees, and is currently a member of the Peace and Conflict Studies Focus Award Committee and the SAC chair

Joel Magnuson – Participated in room use task force activities, student club advising, Instructional Technology Committee, Institutional Effectiveness Committee, faculty search committees, performed music for Rock Creek events and served as SAC chair

Arthur Tobin – Has been a leader in the effort to create an honors program at PCC, a member of the EAC, and on 5 faculty hiring committees

Rhonda Collier – Currently participating in the faculty internship/mentor program

Nancy Scott – Presented at Focus the Nation

vii. Faculty awards & recognitions:

Joel Magnuson – had his book, *Mindful Economics*, published in 2008 by Seven Stories Press in New York. The book now has world-wide distribution in the general trade market, is used as a text in colleges and universities across the United States. After receiving a “highly recommended” review in the *Library Journal*, *Mindful Economics* is in hundreds of libraries in the US, Canada, Britain, Australia, New Zealand, and several countries in Europe. As part of being a published author, Joel has, on his own time—weekends, summer, and evenings—done radio and documentary film interviews, book signings, speaking engagements, and conference presentations throughout the United States and Europe. He continues to write and publish articles in academic journals, anthologies, and is currently working on a second book. Joel is also a visiting fellow at Anglia Ruskin University, Cambridge, UK.

Bill Beebe has published five books on international trade and energy economics. He has had two articles published in professional journals.

Rhonda Collier – Has received 4 Teaching Performance Award Payment (TPAP) from ITT.

B. Instructor Qualifications & have they changed?

The requirement for economics faculty at Portland Community College is a Master’s Degree in Economics or a Master’s Degree in a related field plus a minimum of 30 hours of graduate coursework in Economics. Although we have had discussions on this topic, there has been no change in this requirement since the last review. Half of the full-time faculty members and some of the part-time faculty have Ph.D.s in economics or a related field. Other full-time and part-time faculty members have completed additional graduate-level coursework after the completion of their Master’s Degree. All economics faculty members have attended a variety of workshops, seminars and symposiums on economic issues and on teaching techniques and strategies.

C. Professional Development

We are committed to developing our skills and maintaining currency in our field. With support from the college and independently, we regularly attend conferences, write papers and publications, and do presentations. Several faculty members have taken mini-courses to learn to use web-CT and/or Blackboard. Some examples of other professional development activities include:

James Eden: Attended the “Quality Matters” PCC in-service and regularly attends “Great Decisions” Lectures at PSU

Youssef Khodaparast: Member of American Economic Association (AEA) and Association for Evolutionary Economics (AFEE). He regularly attends economic conferences scheduled by these associations. His recent area of interest is in comparative economic systems.

Arthur Tobin: Attended conferences of the American Psychological Association and the Association for Psychological Science

Nancy Scott: Attended “Internationalizing the Curriculum” seminar. Completed a “Teaching for Learning” course in 2008.

Norm Solomon: Served on the State Water Resources Research Council and the Strategic Water Management Group, as well as the Governor's Task Force on Global Warming. He is currently attending economics courses at PSU.

5. FACILITIES AND SUPPORT

A. Classroom space, computers, library/media – how do they impact student success?

Economics involves the use of statistical data. Access to this data on the internet during class vastly improves our ability to teach economics. When talking about the national debt, unemployment rates, tax rates and other such topics, displaying the data draws students into the conversation. Many economics textbooks include digital resources for instructors to use in the class for demonstration purposes such as online graphing tools. Access to podiums in the classroom enables instructors to leverage these tools. For this reason, economics courses should be taught in classrooms that are equipped with computer podiums. We are often assigned to rooms without podiums. This diminishes student learning.

B. How do students use the library or other o/s the classroom info resources?

Economics students are given assignments that require research. This might mean finding journal articles, reading newspapers or periodicals, or finding statistical data. To complete these assignments, students use materials in the library or on the internet. Many students make use of the computer labs to type their assignments. Samples of assignments that require students to do such research can be found in Appendix 12. Most students have access to textbook websites which contain study guides, practice quizzes, and direct links to newspaper and magazine articles. They are very popular with students. Most economics faculty post their course materials on the Web through the Blackboard or mypcc course tools. Students find them very helpful.

C. Clerical, technical, administrative, tutoring support

Economics students often ask if there are economics tutors available. Unfortunately there are no economics tutors in the learning centers. Students are sometimes referred to the writing tutors and/or math tutors for assistance with assignments. However, economics tutors are preferable. We have discussed the possibility of part-time faculty tutoring. Instructors' office hours are utilized by students heavily. However, excessive noise and distractions in the office areas do not provide a suitable environment for tutoring and advising. The high noise levels in the open office areas often makes it impossible to get work done or have sensitive conversations. For several faculty members that do their course preparation work or on-line coursework at home, the lack of software support is a problem. Several programs are necessary to do this work and the college does not make this software available for home computers and does not offer financial assistance for faculty to purchase such software. Access to PCC computers has improved for part-time faculty, but due to office sharing arrangements and time schedules, most part-time faculty still must do most of their work on home desk-top computers or on personal lap-tops.

D. How does Advising, OSD or other student services impact students

Students with special needs are frequently present in economics courses. Advising and OSD services are critical to the success of these students. Unfortunately, increasing paper work requirements and rule changes by the OSD have created a lot of confusion for both the faculty and students. Some students have informed us that they need services, but have given up trying to work with OSD in frustration. Extended open hours at the OSD may be helpful to such students.

E. Patterns of scheduling (class size, duration, times, location) address the needs of the discipline & students

We believe that students' choices of class times at Sylvania are limited. The current odd number starting times (i.e. 9-11, 1-3, etc.) limit students' choices for our courses and possibly hurting enrollment numbers. Offering Saturday, evening and online courses helps accommodate students who are also working full or part time jobs. However, not many economics courses are offered at SE Center location. It's possible that many students living in east Portland or Gresham could be better served by offering more sections there.

6. CTE Programs (not applicable)

7. RECOMMENDATIONS FOR IMPROVEMENT

A. Assess the strengths

The strengths of the department include experience, commitment, communication, collegiality, and willingness to try new ideas in the classroom. The experience of the faculty includes not just the number of years teaching economics. It also includes teaching other subjects, teaching at other colleges and teaching in other countries. Several faculty members have experience working as professional economists and

working in other professions. The commitment to teaching economics and to PCC is evidenced by the many years that several of the part-time faculty members have spent teaching at PCC. We have good communication between faculty members and regularly share ideas on assignments, assessments, teaching strategies and current economic conditions and issues. We bounce ideas off of each other, make changes, survey students, keep what works and get rid of ideas that don't. We enjoy challenging ourselves and our students. Moreover, based on our interviews and conversations with faculty and department chairs at other local schools, our courses are designed and taught with rigor and high standards. This has helped our transfer students greatly.

B. Identify areas in need of improvement

The 4-credit conversion may have negatively affected enrollment in our elective courses such as EC203 and EC 216 because of the higher cost. We would like to be able to offer a wider variety of courses to those students who are more interested in economics. Another possibility is that we may be able to offer courses that will fit into other PCC programs as electives. Health care economics, engineering economics, environmental economics are possibilities.

Most students take economics as a required course. We want to generate more student interest in economics. One way to do this may be to invite guest speakers to campus that address topics that students are interested in.

C. Prepare a set of recommendations for

i. Curriculum development: Most members of our faculty do not find enough time to devote to curriculum development. This is a very serious problem in our program. Designing new courses that meet the needs of our students with changing times and structural changes in our economy is very important. Additional financial support for curriculum development and financial support or paid release times for both part time and full time faculty would be very helpful. In addition, we recommend that the two annual SAC in-service days be scrapped. Instead give the SAC chair a 25% release for one quarter per academic year to undertake many tasks and paper work that involve curriculum development. This would support more (part time) faculty interests in curriculum activities and new courses.

ii. Professional development: Our division as well as the college must provide more funds and opportunities for faculty professional development activities such as longer sabbaticals and better funded professional leaves.

iii. Access & success for students: To improve student success, we would like to be given priority for podium-equipped classrooms. We also want to be able to hire tutors in the campus learning centers.

iv. Needed resources: We want the open position at Cascade campus filled fall term 2010. We would like money for curriculum development, tutors, sabbaticals, attendance at conferences for both full-time and part-time faculty, software support, and to bring guest speakers to campus. We would like Institutional Research to study the impact of Distance Learning course offerings on enrollment in on-campus sections.

v. Meeting community needs: We need to survey students and faculty to find out what topics or current economic issues they are interested in. We can use that information to

try to secure guest speakers and increase knowledge of those issues from an economic perspective among the PCC community.

Of the above, filling the open position at Cascade campus and being assigned podium-equipped rooms for all economics sections at all campuses and centers is of greatest importance

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Appendix 1

Program Review Presentation

November 6, 2009, from 2:00 to 4:00 pm

Welcome and introductions

Economics Program Highlights: Youssef Khodaparast

Economics SAC Strengths and Weaknesses: James Eden

Economics Program Statistics: Joel Magnuson

Recommendations: Arthur Tobin

Questions and Discussion

Appendix 2

ECOMOMICS SUBJECT AREA COMMITTEE (SAC)

SAC Administrative Support:
Admin Support: Nancy Wessel
SAC Chair: Youssef Khodaparast

Full-time Faculty
James Eden
Youssef Khodaparast
Joel Magnuson
Arthur Tobin

Part-time Faculty
Patricia Atkinson
Bill Beebe
Rhonda Collier
Maurita Fawls
Francis Ferguson
Melike Kayim
Nancy Scott
Norman Solomon
John Somers
John Wilkins

Campus Economics Administrative Support:

Cascade Liberal Arts and Mathematics Division:
Dean: Nancy Wessel, CA SC211, 503-978-5294, nancy.wessel@pcc.edu
Support: Janet Di Grazia, CA SC211, 503-978-5500, jdigrazi@pcc.edu
Department Chair: James Harrison, CA SC206, 503-978-5215, jharriso@pcc.edu

Rock Creek Business and Humanities:
Dean: Karen Sanders, RC3/204, 503-614-7085, ksanders@pcc.edu
Support: , RC 2/225, 503-614-7248,
Department Chair: Joel Magnuson, RC 3/216, 503-614-7089, jmagnuso@pcc.edu

Sylvania Social Science and Business Division:
Dean: Brooke Gondara, SY SS217, 503-977-4288, bgondara@pcc.edu
Support: Rusty Debord, SY SS217, 503-977-4289, rdebord@pcc.edu
Department Chair: Rose Bettencourt, SY SS215, 503-977-4081, rbettenc@pcc.edu

Appendix 3

Portland Community College Master Plan

As of February 21, 2008

VISION

Building futures for our Students and Communities

MISSION

Portland Community College provides access to an affordable, quality education in an atmosphere that encourages the full realization of each individual's potential. The college offers opportunities for academic, professional, and personal growth to students of all ages, races, cultures, economic levels, and previous educational experiences.

WHO WE ARE

Portland Community College is a public, multi-campus, comprehensive community college serving the lifelong learning needs of our students. We offer college transfer programs; professional technical education programs; adult basic skills; opportunities to develop English as a second language; high school completion and dual credit; community and continuing education programs; and service-learning opportunities that foster the development of civic responsibility and engagement. Through extensive partnerships with business, industry, labor, educational institutions and the public sector, we provide training and learning opportunities for the local and state workforce and promote economic and community development.

STATEMENT OF VALUES

- Quality, lifelong learning experiences that helps students to achieve their personal and professional goals
- An environment that is committed to diversity as well as the dignity and worth of the individual
- Continuous professional and personal growth of our employees and students
- Effective teaching and student development programs that prepare students for their roles as citizens in a democratic society in a rapidly changing global economy
- Academic Freedom and Responsibility - creating a safe environment where competing beliefs and ideas can be openly discussed and debated
- Sustainable use of our resources
- Collaboration predicated upon a foundation of mutual trust and support
- An agile learning environment that is responsive to the changing educational needs of our students and the communities we serve
- Accountability based upon an *outcomes-based* approach in education
- The public's trust by effective and ethical use of public and private resources

GOALS

Goal 1 – **Access:** We will improve access to quality lifelong learning opportunities through the effective use of technology, affordable classes and the strategic location of facilities.

Goal 2 – **Student Success:** We will promote success for all students through outstanding teaching, student development programs, and support services in all that we do;

Professional technical education will be responsive to industry needs and prepare students to work in a global marketplace.

Transfer preparation will prepare students for success in obtaining baccalaureate degrees.

College readiness will promote student preparation for college-level programs and employment.

Community education/continuing education will provide quality education to enrich students personally, socially, culturally, and to upgrade occupational/job skills.

Goal 3 – **Diversity:** We will enrich the educational experience by committing to the development of diversity in our student body, faculty and staff.

Goal 4 – **Continuous Improvement:** We will develop, safeguard and allocate our resources (human, financial, capital, and technological) to ensure through planning and assessment the delivery of relevant, quality programs and services.

Goal 5 – **Cultivating Partnerships:** We will effectively respond to the educational needs of our students and communities through strategic alliances with business, government agencies and educational institutions.

Goal 6 – **Community:** We will facilitate growth and development of our district communities by accepting a leadership role and serving as a key educational resource to the community.

Appendix 4

ECONOMICS CATALOG DESCRIPTION

EC 200 Introduction to Economics 4.00 A survey course covering: basic microeconomic and macroeconomic concepts, the history of economic ideas, and a variety of economic issues. Depending on the instructor's interest, the issues covered might include: price ceilings, price floors, pollution, income distribution, poverty, international trade issues, inflation, unemployment, economic growth, public finance, and transitional economies. This course is recommended for students who desire a one term survey course. Recommend: MTH 95. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores

EC 201 Principles of Economics: Microeconomics 4.00 A study of the market system, involving the essentials of demand and supply analysis; competition and monopoly; labor markets; public policy towards business; distribution of income; international trade and commercial policy; comparative advantage, tariffs, and quotas. EC201 and EC202 together constitute the two term transfer sequence. Recommended: MTH 95. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores.

EC 202 Principles of Economics: Macroeconomics 4.00 A study of factors affecting the level of national income; the essentials of money and banking; the role of government expenditure and taxation in achieving economic stability, growth, and development; international monetary issues including exchange rates and the balance of payments. Recommended: MTH 95 and EC 201. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores.

EC 203 Principles of Economics: Applications to Economic Issues 4.00 An economic issues course that covers specific topics in some depth. Topics covered change with current events and instructor interest and may include: International trade and finance; energy and resource economics; poverty, discrimination, and income distribution in national economies and the global economy; economic development; financial market instability; environmental and sustainability issues; government and central bank policies and competing ideologies; other current or relevant topics. Prerequisites: WR 115, RD 115, and MTH 95 or equivalent placement test scores, and EC 200 or EC 201 or EC 202.

EC 216 Labor Markets: Economics of Gender, Race, and Work 4.00 The study of labor markets with emphasis on the economic status of women and their decisions about work and family. Topics of study include: recent developments in the labor market; the gender pay gap and women-men occupational differences; labor supply decisions; human capital theory; racial discrimination; economics of marriage and household decisions. Recommended: MTH 95. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores

EC 230 Contemporary World Economic Issues: International Economics 3.00 Selected issues and problems related to international economics and international economic

institutions. Includes trade and the balance of payments, trade competition between Japan and the U.S., reform and restructure of the Russian and Eastern European economies, economic development and problems of developing nations.

EC 285 Introduction to Political Economy 4.00 Examines the United States economy from a systems/ institutional perspective. With this approach, students will explore the key institutions that make up the U.S. economy including corporations, government, the market system, labor unions, monetary and financial institutions, and others. Students will also examine three problem areas: environmental degradation and resource depletion; social and political inequality; and economic instability. Also introduces possible solutions based on institutional change and development. Students will deepen their understanding of capitalism in America, as well as gain insights into developing viable economic alternatives based on principles of environmental sustainability, equity and economic stability. Recommended: MTH 95 and WR 115.

Appendix 5
Course Content and Outcome Guides

Course Content & Outcome Guide

Date: 20-OCT-2009

Course Number: **EC 200**

Course Title: Principles of Economics: Introduction, Institutions & Philosophies

Credit Hours: 4

Lecture hours: 40

Lecture/Lab hours: 0

Lab hours: 0

Special Fee: none

Course Description

An introductory survey course covering six topic areas: basic economic concepts, microeconomics, macroeconomics, the history of economic ideas, international trade and a variety of economic issues. This course is recommended for students who desire a one term survey course. Recommend: MTH 95. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores. It is also assumed that the student will have reading, writing, and mathematics skills appropriate to coursework at the freshman college level.

Addendum to Course Description

Credits from this course qualify for general education purposes at Portland Community College and may be applied toward satisfying Associates Degrees at Portland Community College. Please contact SACC chair for SACC-approved textbooks to be used for this course. Supplemental texts and other materials are to be used at the individual instructor's discretion. Prices for texts and/or other materials may be found at the Portland Community College bookstore.

Intended Outcomes for the course

1. To think critically and formulate independent and well-considered conclusions about economic issues and policies.
2. To effectively participate in the political process and the economy by utilizing an understanding of the historical evolution of economic systems, institutions and ideologies.
3. To make rational decisions based on rudimentary marginal analyses.
4. To succeed in other Principles of Economics courses.

Course Activities and Design

This course may include lecture and discussion formats utilizing faculty expertise, texts, supplementary reading materials, films, speakers, and other classroom aids at the discretion of the instructor. Regular attendance and completion of assigned reading are essential to the successful completion of this course. Instructors will teach in accordance with the goals and objectives listed in this Course Content Guide. The course Content Guides are developed by college-wide subject area faculty and are approved by management.

Outcome Assessment Strategies

Traditional and nontraditional techniques will be used to assess student mastery of the content, competencies, and outcomes. These techniques can assess either student products or processes:
Products: multiple choice exams, essays, individual group projects, student demonstrations, research projects, other projects with specified rating criteria, and portfolios.
Processes: interviews, documented observations, web searches, journals, student self-evaluations.

Course Content (Themes, Concepts, Issues and Skills)

The course is an introductory survey course and all required and optional subject matter, concepts, themes and issues are included the topic areas listed below.

1. **Basic Economic Concepts:** basic supply and demand, scarcity, opportunity cost and efficiency (required).
2. **Microeconomics:** the supply and demand market model, elasticity (required); consumer and producer surplus, deadweight loss, price floors and ceilings and market structures (optional)
3. **Macroeconomics:** Gross Domestic Product (GDP), inflation, unemployment, aggregate supply and demand, monetary and fiscal policy and economic growth (required).
4. **The History of Economic Ideas:** The contributions of the following people: Adam Smith, Thomas Malthus, David Ricardo, Karl Marx, Thorstein Veblen, John M. Keynes and Alfred Marshall (required).
5. **International Trade:** Comparative advantage in international trade, balance of payments (required); international institutions, tariffs and quotas and exchange rates (optional).
6. **Economic Issues:** Depending on the instructor's interests the following issues are optional: environmental issues and externalities, income distribution, poverty and anti-poverty programs, health care, social security, transitional economies, economics of developing nations and other current issues.

Skills and competencies:

1. Build a vocabulary of economic terms that will enable the student to find the daily reading of papers and periodicals easier and more meaningful.
2. Develop the ability to summarize an economic argument, understand economic reports, and to discern between positive and normative statements.
3. Develop the ability to acquire and analyze quantitative data and make mathematical computations using formulas.
4. Develop the ability to use and apply theoretical models.
5. Develop the ability to conduct cost/benefit analyses.
6. Develop the ability to think clearly about social and environmental problems in an orderly and objective way.

Instructor's Qualifications:

A Masters degree in economics or a degree in a related discipline with at least 30 hours of graduate credits in economics. A background of coursework in economic history and economic thought is preferred.

Course Content & Outcome Guide

Date: 20-OCT-2009

Course Number: **EC 201**

Course Title: Principles of Economics: Microeconomics

Credit Hours: 4

Lecture hours: 40

Lecture/Lab hours: 0

Lab hours: 0

Special Fee:

Course Description

This course is an introduction to the principles of microeconomics. It is intended to enhance the student's ability to recognize and analyze economic problems in the United States. Students study the American microeconomic system, which includes a familiarization with the basis of the price system and resource allocation; the operation of the firm; market concentration; regulation and antitrust policies. EC201 and EC202 together constitute the two term transfer sequence. Recommended: MTH 95. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores. It is also assumed that the student will have reading, writing, and mathematics skills appropriate to coursework at the freshman college level.

Addendum to Course Description

Credits from this course qualify for general education purposes at Portland Community College and may be applied toward satisfying Associates Degrees at Portland Community College and/or Oregon transfer degrees. Textbooks are at the discretion of each course instructor with approval of the SACC. Prices for texts and/or other materials may be found at the Portland Community College bookstore.

Intended Outcomes for the course

1. To make rational decisions in the conduct of daily life.
2. To effectively participate in the political process.
3. To challenge conventional thought.
4. To complete additional courses including economics at the sophomore level and above; to successfully transfer to a four-year institution of higher education.
5. To formulate independent and well-considered conclusions.
6. To effectively participate in the economy as a consumer and as a producer.

Course Activities and Design

This course may include lecture and discussion formats utilizing faculty expertise, texts, supplementary reading materials, films, speakers, and other classroom aids at the discretion of the instructor. Regular attendance and completion of assigned reading are essential to the successful completion of this course. Instructors will teach in accordance with the goals and objectives listed in this Course Content Guide. The course Content Guides are developed by college-wide subject area faculty and are approved by management.

Outcome Assessment Strategies

Traditional and nontraditional techniques will be used to assess student mastery of the content, competencies, and outcomes. These techniques can assess either products or processes:

Products: multiple choice exams, essays, individual group projects, student demonstrations, research projects, other projects with specified rating criteria, and portfolios.

Processes: interviews, documented observations, web searches, journals, student self-evaluations.

Course Content (Themes, Concepts, Issues and Skills)

1. Demand analysis: identify the factors that determine consumer demand. This will include topics such as elasticities and the utility theory of value.
2. Production costs: identify types of production costs and illustrate graphically various cost curves.
3. Profit maximization: how firms maximize profits under different types of markets such as perfect competition; monopoly; oligopoly; monopolistic competition; etc.
4. Labor markets: wage determination and hiring decisions
5. Factor prices: Theories of rent, profit, interest and wages
6. Market failures: public goods and externalities
7. Government intervention: regulation of industry and antitrust policies. The roles and functions of government in regulating market activities and encouraging competition.

Skills and competencies:

1. Build a vocabulary of economic terms that will enable the student to find the daily reading of papers and periodicals easier and more meaningful.
2. Develop the ability to summarize an argument, understand economic reports, and to discern between positive and normative statements.
3. Develop the ability to acquire and analyze quantitative data and make mathematical computations using formulas.
4. Develop the ability to use and apply theoretical models.
5. Develop the ability to conduct cost/benefit analyses.
6. Develop the ability to think clearly about social and environmental problems in an orderly and object way.

Instructor's Qualifications:

A Masters degree in economics or a degree in a related discipline with at least 30 hours of graduate credits in economics. A background of coursework in economic history and economic thought is preferred.

Course Content & Outcome Guide

Date: October 20, 2009

Course Number: EC 202

Course Title: *Principles of Economics: Macroeconomics*

Credit Hours: 4

Lecture Hours per Week: 4

Number of Weeks: 12

Special fees: None

Course Description for Publication:

This course covers the overall economy. It includes the basic reasons for and the problems of recession, inflation, and stagflation; the use of monetary, fiscal, and incomes policies; and other economic management tools. Recommended: MTH 95 and EC 201. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores.

Addendum to Description:

Credits from this course qualify for general education purposes at Portland Community College and may be applied toward satisfying Associates Degrees at Portland Community College and/or Oregon transfer degrees. Textbooks are at the discretion of each course instructor with approval of the SACC. Prices for texts and/or other materials may be found at the Portland Community College bookstore.

Intended Outcomes for the Course:

1. To make rational decisions in the conduct of daily life.
2. To effectively participate in the political process.
3. To challenge conventional thought.
4. To complete additional courses including economics at the sophomore level and above; to successfully transfer to a four-year institution of higher education.
5. To formulate independent and well-considered conclusions.
6. To effectively participate in the economy as a consumer and as a producer.

Course Activities and Design:

This course may include lecture and discussion formats utilizing faculty expertise, texts, supplementary reading materials, films, speakers, and other classroom aids at the discretion of the instructor. Regular attendance and completion of assigned reading are essential to the successful completion of this course. Instructors will teach in accordance with the goals and objectives listed in this Course Content Guide. The course Content Guides are developed by college-wide subject area faculty and are approved by management.

Assessment Strategies:

Traditional and nontraditional techniques will be used to assess student mastery of the content, competencies, and outcomes. These techniques can assess either products or processes:

Products: multiple choice exams, essays, individual group projects, student demonstrations, research projects, other projects with specified rating criteria, and portfolios.

Processes: interviews, documented observations, web searches, journals, student self-evaluations.

Subject Matter, Concepts, Themes, and Issues:

1. Introduction to Macroeconomics
2. Measuring Output and the Price Level
3. Unemployment and Inflation
4. Aggregate Demand/Aggregate Supply Analysis
5. The Income-Expenditure Model
6. Fiscal Policy
7. Money and Banking
8. Monetary Policy
9. Macroeconomic Policy Issues
10. Open Economy Macroeconomics
11. Economic Growth

Competencies and Skills:

1. Build a vocabulary of economic terms that will enable the student to find the daily reading of papers and periodicals easier and more meaningful.
2. Develop the ability to summarize an argument, understand economic reports, and to discern between positive and normative statements.
3. Develop the ability to acquire and analyze quantitative data and make mathematical computations using formulas.
4. Develop the ability to use and apply theoretical models.
5. Develop the ability to conduct cost/benefit analyses.
6. Develop the ability to think clearly about social and environmental problems in an orderly and object way.

Instructor's Qualifications:

A Masters degree in economics or a degree in a related discipline with at least 30 hours of graduate credits in economics. A background of coursework in economic history and economic thought is preferred.

Course Content & Outcome Guide

Date: 20-OCT-2009

Course Number: **EC 203**

Course Title: Principles of Economics: Application to Economic Issues

Credit Hours: 4

Lecture hours: 40

Lecture/Lab hours: 0

Lab hours: 0

Special Fee:

Course Description

This is an economic issues course that covers specific topics in some depth. Topics covered change with current events and instructor interest and may include: International trade and finance; energy and resource economics; poverty, discrimination, and income distribution in national economies and the global economy; economic development; financial market instability; environmental and sustainability issues; government and central bank policies and competing ideologies; other current or relevant topics. Recommended: MTH95. Prerequisites: WR115, RD115, and MTH20 or equivalent placement test scores, and EC200 or EC201 or EC202.

Addendum to Course Description

Credits from this course qualify for general education purposes at Portland Community College and may be applied toward satisfying Associates Degrees at Portland Community College. Contact SAC chair for a list of SACC-approved textbooks for this course. Supplemental books and other materials are at the discretion of each course instructor. Prices for texts and/or other materials may be found at the Portland Community College bookstore.

Intended Outcomes for the course

1. To read news, magazine or journal articles about specific economic issues with confidence.
2. To approach economic issues with an educated, critical and open mind.
3. To effectively participate in the political process and the economy by utilizing an understanding of the historical evolution of economic systems, institutions and ideologies.
4. To be an active participant in the political process by utilizing an objective understanding of the various aspects of economic issues.
5. To complete additional courses including economics at the sophomore level and above; to successfully transfer to a four-year institution of higher education.
6. To be an active participant in the global community by utilizing an objective understanding of international economic issues and problems facing people the developing countries.

Course Activities and Design

This course may include lecture and discussion formats utilizing faculty expertise, texts, supplementary reading materials, films, speakers, and other classroom aids at the discretion of the instructor. Regular attendance and completion of assigned reading are essential to the successful completion of this course. Instructors will teach in accordance with the goals and objectives listed in this Course Content Guide. The course Content Guides are developed by college-wide subject area faculty and are approved by management.

Outcome Assessment Strategies

Traditional and nontraditional techniques will be used to assess student mastery of the content, competencies, and outcomes. These techniques can assess either products or processes:

Products: multiple choice exams, essays, individual group projects, student demonstrations, research projects, other projects with specified rating criteria, and portfolios.

Processes: interviews, documented observations, web searches, journals, student self-evaluations.

Course Content (Themes, Concepts, Issues and Skills)

This course may all or part of the following:

1. Monetary and fiscal policies and the different approaches to macroeconomic management. Specifically examines Keynesian Demand-Side and the Supply-Side approaches.
2. International economics and economic globalization that includes imports and exports, international trade, trade deficits/surpluses, trade theory and specialization, domestic exchange equations, terms of trade, comparative advantage and absolute advantage, and free trade and protectionist arguments.
3. International finance: exchange rates, balance of payments, current and capital accounts, and international financial market instability.
4. Energy resources availability, alternative energy, environmental economics and economic sustainability.
5. Income distribution, Lorentz curves and Gini Indexes, poverty, social security and welfare reform, labor markets and unionization; income distribution in both the national economy and in the global economy.
6. Economic development
7. Other current economic subjects or topics that are of particular interest to students and other PCC programs.

Competencies and Skills:

1. Build a vocabulary of economic terms that will enable the student to find the daily reading of papers and periodicals easier and more meaningful.
2. Develop the ability to summarize an argument, understand economic reports, and to discern between positive and normative statements.
3. Develop the ability to acquire and analyze quantitative data and make mathematical computations using formulas.
4. Develop the ability to use and apply theoretical models.
5. Develop the ability to conduct cost/benefit analyses.
6. Develop the ability to think clearly about social and environmental problems in an orderly and object way.

Instructor's Qualifications:

A Masters degree in economics or a degree in a related discipline with at least 30 hours of graduate credits in economics. A background of coursework in economic history and economic thought is preferred.

Course Content & Outcome Guide

Date: 08-OCT-2008

Course Number: **EC 216**

Course Title: Labor Markets: Economics of Gender, Race, and Work

Credit Hours: 4

Lecture hours: 40

Lecture/Lab hours: 0

Lab hours: 0

Special Fee:

Course Description

The study of labor markets with emphasis on the economic status of women and their decisions about work and family. Topics of study include: recent developments in the labor market; the gender pay gap and women-men occupational differences; labor supply decisions; human capital theory; racial discrimination; economics of marriage and household decisions. Recommended: MTH 95. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores.

Addendum to Course Description

Credits from this course qualify for general education purposes at Portland Community College and may be applied toward satisfying Associates Degree at PCC. Contact SAC chair for a list of SACC-approved textbooks for this course. Supplemental books and other materials are at the discretion of each course instructor. Prices for texts and/or other materials may be found at the Portland Community College bookstore.

Intended Outcomes for the course

- To provide a general information about recent labor market trends and their implications for families and women in particular.
- To enhance students' understanding of the gender gap and its causes with respect to income, occupation, and human capital differences.
- To assist students to understand the household as an economic unit; and how gender and division of labor within the household affects labor supply decisions and income.
- To increase students' knowledge of the trend and extent of racial discrimination and inequality.
- To help students understand the role and the process of collective bargaining in the labor market.
- To enrich students' knowledge of the causes and effects of unemployment, and unemployment policies.

Course Activities and Design

This course may be conducted through combinations of methods and tools which may include lectures; classroom discussions; group discussions; texts and supplementary readings; films; guest speakers and other classroom aids at the discretion of the instructor. Students are required to attend classes regularly and complete their reading/writing assignments promptly.

Outcome Assessment Strategies

At the beginning of the course, the instructor will hand out a course syllabus, including the criteria for assigning a course grade. Different techniques may be used for assessment. They may include: multiple choice exams, essays, individual group projects, student demonstrations or presentations, research projects or other projects with specified rating criteria. Assessment techniques for processes may include: interviews, documented observations, web searches, journals, and student self-evaluations.

Course Content (Themes, Concepts, Issues and Skills)

1. The Nature of Women and Men: A Socio-biological Perspective
2. Family as an Economic Unit
3. Labor Supply Participation Decisions
4. Occupational Segregation
5. The Role of Labor Market Discrimination in Occupation and Earning Differences
6. Racial Discrimination
7. Unemployment
8. Unions and Collective Bargaining
9. Recent Developments in the Labor Market and Their Impacts on Women and Men
10. Public Policies

Competencies and Skills:

1. Be able to identify the changing forces, such as demographics, that shape the U.S. labor market trends.
2. Explain the nature and causes of occupational segregation and the gender pay gap.
3. Express the knowledge about factors that affect labor supply decisions for women vis-à-vis their men's counterparts.
4. Understand the household as an economic unit and explain their knowledge about the link between division of labor within the household and income or occupation.
5. Be able to understand the trends in racial inequalities, and the changes in family structures among black Americans.
6. Be able to understand the goals and objectives of unions and their effects in our economy.
7. Explain the nature and causes of unemployment.

Instructor's Qualifications:

A Masters degree in economics or a degree in a related discipline with at least 30 hours of graduate credits in economics. A background of coursework in economic history and economic thought is preferred.

Course Content & Outcome Guide

Date: 03-DEC-2007

Course Number: **EC 230**

Course Title: Contemporary World Economic Issues: International Economics

Credit Hours: 3

Lecture hours: 30

Lecture/Lab hours: 0

Lab hours: 0

Special Fee:

Course Description

Selected issues and problems related to international economics and international economic institutions. This includes trade and the balance of payments; trade competition between the U.S. and other nations; reform and restructure of the Russian and Eastern European economies, economic development and problems of developing nations.

Prerequisites: WR 115, RD 115, and MTH 95 or equivalent placement test scores, and EC 200 or EC 201 or EC 202.

Addendum to Course Description

Credits from this course qualify for general education purposes at Portland Community College and may be applied toward satisfying Associates Degrees at Portland Community College.

Contact SAC chair for a list of SACC-approved textbooks for this course. Supplemental books and other materials are at the discretion of each course instructor. Prices for texts and/or other materials may be found at the Portland Community College bookstore.

Intended Outcomes for the course

1. To read news, magazine or journal articles about specific economic issues with confidence.
2. To approach economic issues with an educated, critical and open mind.
3. To effectively participate in the political process and the economy by utilizing an understanding of the historical evolution of economic systems, institutions and ideologies.
4. To be an active participant in the political process by utilizing an objective understanding of the various aspects of economic issues.
5. To complete additional courses including economics at the sophomore level and above; to successfully transfer to a four-year institution of higher education.
6. To be an active participant in the global community by utilizing an objective understanding of international economic issues and problems facing people the developing countries.

Course Activities and Design

This course may include lecture and discussion formats utilizing faculty expertise, texts, supplementary reading materials, films, speakers, and other classroom aids at the discretion of the instructor. Regular attendance and completion of assigned reading are essential to the successful completion of this course. Instructors will teach in accordance with the goals and objectives listed in this Course Content Guide. The course Content Guides are developed by college-wide subject area faculty and are approved by management.

Outcome Assessment Strategies

Traditional and nontraditional techniques will be used to assess student mastery of the content, competencies, and outcomes. These techniques can assess either products or processes:

Products: multiple choice exams, essays, individual group projects, student demonstrations, research projects, other projects with specified rating criteria, and portfolios.

Processes: interviews, documented observations, web searches, journals, student self-evaluations.

Course Content (Themes, Concepts, Issues and Skills)

- The benefits and problems posed by international trade.
- Comparative advantage, arguments for trade barriers, the history of trade restrictions in the U.S., and trade friction between the U.S. and Japan.
- U.S. balance of Payments and its effect upon the level of the domestic economy and how the exchange rates are determined.
- The major transactions and accounts of the balance of payments.
- The gold standard, IMF System, & current floating exchange rate system.
- The specific structure and functions of various international institutions.
- The evolution, structure and reform of the major economies of Western & Eastern Europe.
- Common characteristics of Western European Economies.
- The evolution and current status of the European Economic Community.
- Structure and reform of the Eastern European & Russian Economies.
- Basic understanding of economic growth and the problems of developing countries.
- The importance of savings and investment and various growth models
- Analyze a number of barriers to economic growth faced by LDC's.
- U.S. foreign economic policies.
- Third World Nations development strategy.

Course Content & Outcome Guide

Date: 03-DEC-2007

Course Number: **EC 285**

Course Title: Introduction to Political Economy

Credit Hours: 4

Lecture hours: 40

Lecture/Lab hours: 0

Lab hours: 0

Special Fee:

Course Description

This course examines the United States economy from a systems/ institutional perspective. With this approach, students will explore the key institutions that make up the U.S. economy including corporations, government, the market system, labor unions, monetary and financial institutions, and others. Students will also examine three problem areas: environmental degradation and resource depletion; social and political inequality; and economic instability. This course will also introduce possible solutions based on institutional change and development. Students will deepen their understanding of capitalism in America, as well as gain insights into developing viable economic alternatives based on principles of environmental sustainability, equity and economic stability. Recommended: MTH95. Prerequisites: WR115, RD115, and MTH20 or equivalent placement test scores. It is assumed that the student will have reading, writing, and mathematics skills appropriate for coursework at the freshman college level.

Addendum to Course Description

Credits from this course qualify for general education purposes at Portland Community College and may be applied toward satisfying Associates Degrees at Portland Community College. Contact SAC chair for a list of SACC-approved textbooks for this course. Supplemental books and other materials are at the discretion of each course instructor. Prices for texts and/or other materials may be found at the Portland Community College bookstore.

Intended Outcomes for the course

1. Define political economy
2. Define capitalism as an economic system
3. Describe the salient features of a capitalist economy
4. Apply lesson learned from a historical/evolutionary understanding of economic systems
5. Evaluate arguments that apply to key economic issues
6. Approach economic problems critically and creatively
7. Evaluate the role of corporations in the U.S. economy
8. Actively work toward solutions for key economic problems such as inequality, non-sustainability, resource depletion and instability.

Course Activities and Design

This course may include lecture and discussion formats utilizing faculty expertise, texts, supplementary reading materials, films, speakers, and other classroom aids at the discretion of the instructor. Regular attendance and completion of assigned reading are essential to the successful completion of this course. Instructors will teach in accordance with the goals and objectives listed in this Course Content Guide. The Course Content Guides are developed by college-wide subject area faculty and are approved by management.

Outcome Assessment Strategies

Traditional and nontraditional techniques will be used to assess student mastery of the content, competencies, and outcomes. These techniques can assess either products or processes:

Products: multiple choice exams, essays, individual group projects, student demonstrations, research projects, other projects with specified rating criteria, and portfolios.

Processes: interviews, documented observations, web searches, journals, student self-evaluations.

Course Content (Themes, Concepts, Issues and Skills)

1. Economic systems, institutions and their historical evolution.
2. The market system as an institution.
3. Traditional and nontraditional views of the role governments play in capitalist economies.
4. The U.S. financial system: monetary institutions and Wall Street.
5. The need for growth in a capitalist system and the limit to growth.
6. The causes of economic instability and inequality
7. Economic alternatives

Competencies and Skills:

1. Build a vocabulary of economic terms that will enable the student to better understand economic systems.
2. Develop a systems view of economics.
3. Develop a historical perspective on economic systems and understand how these systems are continuously changing and evolving.
4. Develop the ability to think critically and work creatively toward problem solving

Instructor's Qualifications:

A Masters degree in economics or a degree in a related discipline with at least 30 hours of graduate credits in economics. A background of coursework in economic history and economic thought is preferred.

Appendix 6 OUS Match

Oregon State University

ECON 201. INTRODUCTION TO MICROECONOMICS (4). An introduction to microeconomic principles including the study of price theory, economic scarcity, consumer behavior, production costs, the theory of the firm, market structure, and income distribution. Other selected topics may include market failure, international economics, and public finance. PREREQ: MATH 111 or equivalent is recommended. (Bacc Core Course -- Social Processes and Institutions)

ECON 202. INTRODUCTION TO MACROECONOMICS (4). An introduction to macroeconomic principles including the study of the theories of output determination, consumption, investment, inflation, unemployment, and fiscal and monetary policy. Other selected topics may include the study of the international balance of payments, growth and development, and urban and regional problems. PREREQ: MATH 111 or equivalent is recommended. (Bacc Core Course -- Social Processes and Institutions)

ECON 203. APPLICATIONS TO ECONOMIC ISSUES (4). Applications of economic principles to selected United States. and world economic problems such as growth, instability, poverty, pollution, trade imbalance. PREREQ: ECON 201, ECON 202.

University of Oregon

Economics Courses (EC)

101 Contemporary Economic Issues (4) Examines contemporary public policy using economic principles. Topics may include balanced budgets and tax reform, unemployment, health care, poverty and income redistribution, environmental policy, and international trade policy.

199 Special Studies: [Topic] (1-5R)

201 Introduction to Economic Analysis: Microeconomics (4)

202 Introduction to Economic Analysis: Macroeconomics (4)

HC 204 (H) Honors College Introduction to Microeconomics (4)

HC 205 (H) Honors College Introduction to Macroeconomics (4)

Appendix 7
CORE OUTCOMES MAPPING SAC

EC: Economics

CORE OUTCOMES MAPPING

SAC EC: Economics

Mapping Level Indicators:

Core Outcomes:

1. Not Applicable.
2. Limited demonstration or application of knowledge and skills.
3. Basic demonstration and application of knowledge and skills.
4. Demonstrated comprehension and is able to apply essential knowledge and skills.
5. Demonstrates thorough, effective and/or sophisticated application of knowledge and skills.

1. Communication.
2. Community and Environmental Responsibility.
3. Critical Thinking and Problem Solving.
4. Cultural Awareness.
5. Professional Competence.
6. Self-Reflection.

Course #	Course Name	CO1	CO2	CO3	CO4	CO5	CO6
EC 200	Introduction to Economics	4	3	4	4		4
EC 201	Principles of Economics: Microeconomics	4	3	4	2		3
EC 202	Principles of Economics: Macroeconomics	4	3	4	4		3
EC 203	Principles of Economics: Applications to Economic Issues	4	3	4	4		4

Appendix 8

PCC Programs Requiring or Recommending Economics Courses

Aviation Science - Airplane or Helicopter (Approved Electives)

EC 200 Principles of Economics: Intro, Institutions & Philosophies 3-4

EC 201 Principles of Economics: Microeconomics 4

EC 202 Principles of Economics: Macroeconomics 4

Business Administration

Associate of Science Oregon Transfer Degree in Business

A minimum of eight credits in microeconomics and macroeconomics with a grade of “C” or better.

Associate of Applied Science Degrees in:

Accounting - EC201 AND EC202

Marketing - EC200

Management – EC200

One-Year Certificates

Accounting Clerk - EC200 OR EC201 OR EC202

Marketing

Less than One-Year Certificates

Accelerated Accounting

Retail Management

Less than One-Year Certificates: Career Pathways

Entry Level Sales and Service

Entry Level Accounting

International Business Program Award: EC230

Peace and Conflict Focus Award

Category IV : Global Peace and Conflict

EC 115 Outlines of Economics

EC 230 Contemporary World Economic Issues: International Economics

Courses that can be used for the AAOT Sequence Requirement

(Choose 2):

EC 200 Introduction to Economics

EC 203 Principles of Economic Issues: Applications to Economic Issues

EC 216 Labor Markets: Economics of Gender, Race & Work

EC 230 Contemporary World Economic Issues: International Economics

EC 285 Introduction to Political Economics

Appendix 9

Enrollment Statistics:

Source: Institutional Effectiveness

<http://www.pcc.edu/ir/reports/index.html>

Student Demographics

	1998/99	1999/2000	2000/01	2007/08
Gender	Female/Male	Female/Male	Female/Male	Female/Male
Economics	49.1 / 50.9	50.3 / 49.7	47.9 / 52.1	43.9 / 56.1
All PCC Transfer*	57.8 / 42.2	57.7 / 42.3	58.3 / 41.7	58.2 / 41.8
Race/Ethnicity	Minority %	Minority %	Minority %	Minority %
Economics	22.2**	23.4**	24.2**	28.5
All PCC Transfer*	21.5	22.0	22.4	26.6
Age	% 18 – 30 years	% 18 – 30 years	% 18 – 30 years	% 18 – 30 years
Economics	80.1	79.2	83.0	82.0
All PCC Transfer*	73.9	74.0	74.0	68.3
Full vs Part Time	% Full Time	% Full Time	% Full Time	% Full Time
Economics	51.73	51.93	52.58	60.4
All PCC Transfer*	49.97	49.51	48.33	43.1
Degree Seeking	% degree seeking	% degree seeking	% degree seeking	% degree seeking
Economics	81.22	82.97	84.70	91.2
All PCC Transfer*	77.71	77.92	79.50	81.8

* All PCC students in transfer program courses.

** More Asian/Pacific Islander students enrolled in economics vs. all PCC transfer programs. Other minorities are less represented in economics vs. all PCC transfer programs.

Appendix 10

Economics Faculty Biographies

Full-time Faculty

James Eden

B.S., Economics, University of Hull, England

M.S., Economics, Portland State University

Before coming to the United States in 1983, I taught in Scotland, England, and Brunei. Immediately before coming to Portland Community College in 1984, I was a graduate teaching fellow at the University of Oregon.

Prior to my bachelor degree, I served in the Royal Air Force and did a tour of duty on Christmas Island (Pacific). After I was demobilized from the RAF, I worked for British Rail at their main computer establishment in Darlington, England.

Youssef Khodaparast

Ph.D., Urban Studies, Portland State University, Portland

M.A., Economics, The New School, NYC

B.A., Business Management, Rasht Business College, Iran

I have been teaching economics at PCC since 1987 counting both full time and part time years. I use cross-cultural approach in my teaching with an emphasis on the Middle East. My current area of research is comparative economic systems.

I am a member and volunteer of Bicycle Transportation Alliance, a bicycle advocacy agency in Portland. I encourage my students to bike to school and offer free copies of Oregon Bicycle Manual to interested students.

Joel Magnuson

Ph.D., Economics, University of Utah, Salt Lake City

B.S., Portland State University, Portland

I have been teaching economics at PCC since 1995 as a full time instructor. Prior to teaching at PCC, I taught as a one-year full time visiting professor of economics at Portland State University and for two years at the University of Utah. I currently hold the position of Department Chair of Social Sciences at Rock Creek.

Arthur Tobin

B.S., Psychology, Ohio State

B.S., Electrical Engineering, University of Colorado

M.S., Economics, Portland State University

Worked as a social worker at a public welfare agency (Columbus, Ohio), a design engineer (Tektronix), and taught at PCC for the last 26 years (10 years in Engineering and 16 years in Economics).

Part-time Faculty

Patricia Atkinson

B.A., Economics, Marist College
M.S., Economics, Portland State University

Mrs. Atkinson is vice president of a Portland firm in the automotive industry, and author of published ancillary materials for Principles of Macroeconomics. She is active in volunteer activities, and at present is hosting her fifth academic-year international exchange student. In addition to various committee positions, she is the mother of three active children, and as an avid long-distance runner has completed the Honolulu and Marine Corps Marathons, and is training to run a third.

Bill Beebe

Economics, BS, Oregon State University
Economics, MS, Southern Oregon University
I completed approximately 90 hours of additional graduate credits in Economics @ Southern Illinois University

I am retired from Bonneville Power Administration (U.S. Department of Energy) as an industry economist, having been there since 1978. My past experience includes working for the Governor's Office, State of Oregon; the Consumer Affairs Office, State of Oregon; and for SAIF, State of Oregon. I have presented papers at the Midwest, Western and Pacific Northwest Economic Associations on International trade, economic history, energy, and privatization topics, and have written two books on international trade in Oregon.

Teaching experience:

Southern Illinois University
John A. Logan Community College
University of Maryland
Portland Community College, 1977 to present

Rhonda Collier

M.A., Economics, George Mason University, Fairfax, VA 1998.
B.A., History, Economics, University of Oregon, Eugene, OR 1994.

I have been teaching Economics at PCC since Winter term, 2004. I also have several years of experience doing cost-benefit studies and statistical analyses for the United States Department of Defense in Washington DC and for the petro-chemical industry. Most recently, I have worked as a computer programmer for the National Headquarters of the American Red Cross.

Maurita Fawls

Francis Ferguson

BA University of Wisconsin, Madison 1967
Phi Beta Kappa, Phi Kappa Phi
MA University of Wisconsin, Madison 1971
Ph.D. University of Wisconsin, Madison 1971

I have taught economics, economic history at Ripon College in Wisconsin; the Victoria University of Wellington, New Zealand; Whitman College, Walla Walla, Wa.; and the University of the Americas, Cholula Mexico. I started teaching at PCC in 1979. I have done professional work in price index development for the Department of Statistics in New Zealand and have worked in Regulatory Affairs as a Rate Economist for NW Natural since 1980. I have a particular interest in History of Economic Thought and Economic History.

Melike Kayim**Nancy Scott**

M.S. degree: Agricultural & Resource Economics, minor in Statistics at Oregon State University in 1980.
B.S. degree: Economics at Southern Oregon State College in 1978.

I have been teaching on a part time basis at P.C.C. since 1988. During that time, I filled in as a sabbatical replacement one term and spent another two terms in a full-time temporary position. I also taught economics courses on a part time basis in the past at Clackamas Community College and Mt. Hood Community College. I currently teach EC201 and EC202 for the Office of Independent Study at Portland State University.

I have attended meetings and conferences by the Oregon Center for Public Policy and the Oregon Employment Department, and a conference at Tacoma Community College examining economic and environmental issues in Chile, Japan, Mexico and Russia. I have done text reviews at the request of publishers and share readings and articles with other faculty members.

In the private sector, I have 14 years of experience working as a commercial lines underwriter for various insurance companies. In addition to risk analysis and pricing, I was responsible for peer training and writing reports for branch office planning documents.

I also have 19 years of volunteer experience in youth activities including as a grade school reading coach, a Boy Scouts of America merit badge counselor, swim coach, and high school ski racing course official and race-worker coordinator. I am currently serving on the City of Beaverton Design Review Board and the Gala Auction Committee for the Portland office of the American Diabetes Association.

Norman K. Solomon:

Brigham Young University (1968 -BA *cum laude* in History)

Utah State University (1975 - MS in Economics)

Portland State University (2009 - Middle East Studies Certificate)

U. S. Army Security Agency (1968-1973) Linguist: French & Khmer
Teaching

Language Training Mission (Provo, Utah), French Instructor (1967-68)

Utah State University, Teaching Assistant (1974-76, 1982)

Idaho State University, Visiting Instructor (1977)

Chemeketa Community College, Adjunct Instructor (1978-82, 1984-85, 2004)

Western Oregon State College, Adjunct Instructor (1985-90)

Willamette University, Adjunct Instructor (1990-97)

Portland Community College, Adjunct Instructor (2007-present)

Research

Oregon Traffic Safety Commission (1978-79), Research Analyst (Program Planner)

Oregon Real Estate Division (1980-81), Assistant Education Director

Oregon Economic Development Department

Research Analyst (Industrial Property Inventory), 1982-84

Enterprise Zone Program Manager, 1985-87

Senior Policy Analyst (Education and Manpower Development), 1987-88

Oregon Public Utility Commission, Senior Policy Analyst (Energy Conservation),
1988-90

Oregon Department of Corrections, Research Analyst

Community Corrections Division, 1990-95

Research Unit, 1995-97

Offender Information and Sentence Computation, 1997-2003

John Somers

B.A., Economics in 1969 from California State University at Chico

M.A., Economics from California State University at San Francisco in 1970.

I taught economics at Rogue Community College from 1972 - 1987 and have been on the full time faculty at PCC since Fall term, 1987. I completed approximately 60 graduate credits at PSU from 1990 to 2000 in the Urban Studies Ph.D. program. I passed my comprehensive exams, but did not work on a dissertation.

John Wilkins

Ph. D., Economic/Resource Geography, Oregon State University, 1980

M.S., Economics, University of Arizona, 1968

B.S., Agricultural Economics, Utah State University, 1962

Part-time economics instructor at Portland Community College, 2001 to present.

English teacher, Japan, 1994-1995.

Over 26 years experience as a professional economist for the Federal government. Experience includes economic base studies, demographic and economic forecasting, economic program impact analysis, electricity rate analysis, industry studies and forecasts, regional macroeconomic forecasting, electricity generating plant analysis, and contract review and writing. Retired in 1994.

Appendix 11

Economics Student Survey

This is just a sample of responses.

“ ___ is a good teacher. I think that bringing current events into discussion is helpful and interesting.”

“I feel far more proficient in the subject after 1 year with instructor ___”

“Instructor communicated well with students and offered study guides and handouts online and in class.”

“This is a well taught class, it just happens to be on difficult material.”

“ ___ was available for extra instruction. Book was difficult for me because the information is difficult for me. ___ did a very good job of making it easier and incorporated a lot of ‘what’s happening now’ into the instruction.”

“Plenty of open discussions that covered a full spectrum of ideas and opinions”

“The instructor’s enthusiasm towards the subject helped inspire interest from the students.”

“Interesting subject matter and excellent in class discussions.”

“ ___ tried to incorporate everything that is going on in the economy in each class. ___ is great and I am thankful that at a community college I got to work with such an A+ teacher.”

“One of the best classes that I have taken the last years.”

“ ___ brought in articles and we talked about on-going issues. Taking this class has opened my eyes about certain issues that I never knew. I feel this class should be required for all students!”

“I thought the instructor was exceedingly proficient, able to explain complex ideas with realistic examples and simple terms.”

“You made the course more interesting and fun than I thought it would be.”

Appendix 12
Sample Classroom Material and Assignments

Distinguishing Needs vs. Wants

I deal with this topic the first day each quarter, beginning with Henry David Thoreau's experience at Walden Pond, where needs were defined in five categories: Food, Shelter, Clothing, Water and Fuel. (He apparently took air for granted.)

The discussion of food hinges on two studies from the University of Florida I learned of at an AAAE conference. The first study found no statistically significant correlation between income and nutritional value received. (Apparently, as incomes rise, people depend more on fast food and on food substitutes - the four Cs: cookies, candy, cake and Coke.) They did find, however, a significant correlation between knowledge about nutrition and nutritional value received. The second study found that biological well-being can be maintained with a diet of wheat, orange juice, sorghum and liver. Before and after tests complemented the traditional physical exam with lab tests of body fluids, hair clippings and nail parings.

The discussion of shelter is formed around my last experience buying a home before our children began leaving home. Although we wound up with a four-bedroom, three-bath home, I assured our children that each of their four grandparents had grown up in families at least as large as ours and that each had spent a significant portion of the growing-up years in a two-room house (*not* a two-bedroom house).

Clothing as a need can be met in a variety of ways. Mohandas Gandhi was famous for making his own clothes, from the shearing and spinning phase through weaving and sewing. Goodwill Industries commissioned a survey of its customers and learned that fully 30 percent had incomes higher than twice the poverty level.

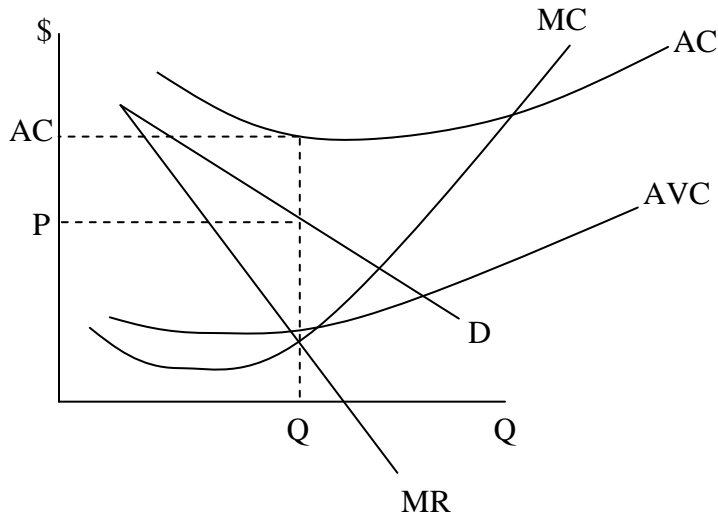
I begin the conversation on water by referring to Del Gardner's seminal research on the price elasticity of demand for culinary water in 23 communities in northern Utah, which he determined to be 0.77. For example, a 10-percent rise in the price of water results in a 7.7-percent reduction in quantity demanded. In the relevant range of our current consumption, therefore, water is *not* a need. We then go on to discuss substitutes for water, as found in the 1977 drought experience of Marin County, California: Plumber services, brown lawn reseeded the following year, grey water turned out into the shrubbery, professional car washes (water recycled and reused), keeping a pitcher of water in the fridge instead of letting the tap run until the water's cool, the Governor's ditty ("If it's yellow, let it mellow; if it's brown, flush it down."), etc.

On the issue of fuel, I rely on my professional experience as an energy conservation analyst for the Oregon Public Utility Commission. We discuss the many substitutes for fuel: Insulation, mass transit, car pooling, high-mileage cars, sweaters, etc.

That's my basic approach, and in an age when our saving rate is low and credit card debt is high, I think it essential to impress on students the distinction between needs and wants.

Monopolistic Competition Exercise:

Part I:



Is this firm earning a profit?

Will this firm shut-down in the short run?

What will happen in this industry that will help firms earning losses to stay in business?
I.e. how does monopolist competition lead to equilibrium?

Part 2:

Q	P	TR	MR	TFC	TVC	TC	MC	AFC	AVC	AC
0	120			20	0					
1	110			20	50					
2	100			20	85					
3	90			20	125					
4	80			20	170					
5	75			20	225					
6	70			20	295					
7	50			20	385					

What is the profit maximizing output level for this monopolistically competitive firm?

What are the profits at this output level?

The consumer price index (CPI) is a fixed-weight index. It compares the price of a fixed bundle of goods in 1 year with the price of the same bundle of goods in some base year.

Calculate the price of a bundle containing 100 units of good X, 150 units of good Y and 25 units of good Z in years 2000, 2001, and 2002.

Convert the results into an index by dividing each bundle price figure by the bundle price in year 2000. Calculate the percentage change in your index between 2000 and 2001 and again between 2001 and 2002.

Was there inflation between 2001 and 2002?

Quantity Prices Prices Prices

Goods Consumed	2000	2001	2002
X = 100	1.00	1.50	1.75
Y = 150	1.50	2.00	2.00
Z = 25	3.00	3.25	3.00

EC 200
Fall 2006
Article Summary Assignment # 1
Due 10/18

Assignment:

Present a summary of an article related to concepts or topics in Chapters 1, 2, 3 or 8 of the Carbaugh textbook. You will also need to submit a type-written summary and a copy of the article to me.

- Step 1: Find the article in the Wall Street Journal or other reputable media source.
- Step 2: Write a summary of the article.
- Step 3: Identify which concepts the article is related to and explain how they are related.
- Step 4: Share your results with the class.
- Step 5: Turn in your written assignment.

Comparative Advantage – Group Activity

Specialization in comparative advantage allows people to increase output and consume more than if specialization does not occur.

Suppose that there are two tribes on survivor. The island that they are on has fish and coconuts. Each tribe can catch fish and coconuts at the following rates. The figures are the maximum number they could get if they only did that activity. For example, if Tribe 1 spent all day fishing they could catch 5 fish. Conversely, if they spent 100% of their time gathering coconuts they could get 20 coconuts

	Fish caught per day	Coconuts gathered per day
Tribe 1	5	20
Tribe 2	20	10

1. Use the information in this table to draw each tribe's PPF. Draw them on the same graph.
2. Suppose each tribe spends half of the day catching fish and half of the day gathering coconuts. How many fish and coconuts will each tribe have? Show these points on their PPF's.

	Fish from ½ day fishing	Coconuts from ½ day gathering
Tribe 1		
Tribe 2		
Total		

3. Calculate each tribe's opportunity cost of fishing and coconut gathering. O.C. = What you give up / what you get.

	O.C. of fishing	O.C. of coconut gathering
Tribe 1		
Tribe 2		

4. What should each tribe specialize in to maximize total output?

5. If specialization took place what would total output be?

	Fish caught per day	Coconuts gathered per day
Tribe 1		
Tribe 2		
Total		

6. Indicate the new total output on the diagram with the PPFs.

7. If the tribes split the new total output equally how much would each tribe have?

	Fish	Coconuts
Tribe 1		
Tribe 2		

Draw this point on the PPF.

Conclusion: With specialization and trade each tribe is able to consume quantities that are beyond their own production possibilities frontier.

1. Cordelia Worsnop is a genetic engineer with an entrepreneurial bent. Two years ago Cordelia developed a gasoline tree (arbor oleum), and her creation is now bearing its first fruit in her backyard. Cordelia's tree produces an environmentally gentle gas; the tree delivers its fruit in convenient five gallon, biodegradable, vine handled, translucent sacks.

The most attractive feature of Cordelia's brainchild is its ability to replace (in the blink of an eye) all harvested sacks – you pluck a sack, blink the old eyes, and another sack (as succulent as a great black plum) appears. Inventory control was never so easy.

Cordelia decides to sell the fruit of her intellectual labors straight from her yard (how she is able to acquire the necessary licensees is not important for our tale). The set up is very simple. Cordelia sits in an easy chair on her back porch writing haiku poems; customers enter her yard, pluck gasoline sacks from the tree, and pay Cordelia as they leave. That's all there is to it – pluck and pay all day.

Question: At Cordelia's profit maximizing price and output combination, what is the value of marginal revenue and what is the numerical value of price elasticity of demand? Explain your answer.

Some information you should consider:

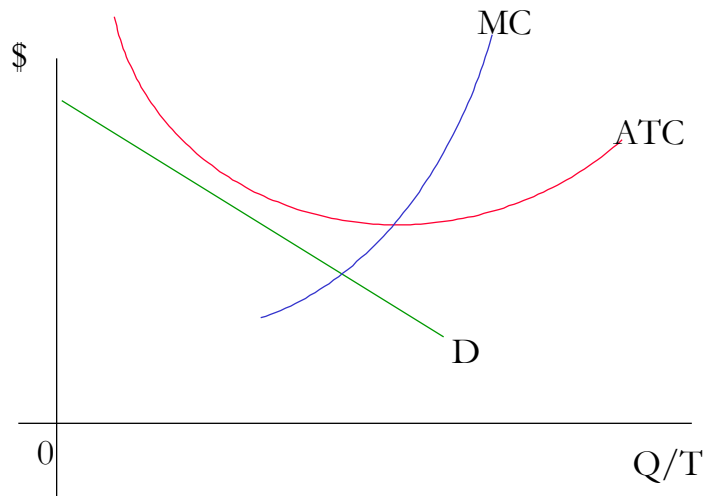
- Cordelia faces a linear downward sloping demand curve.
- Cordelia charges everyone the same price.
- Cordelia's only activity (other than composing haiku poems) is collecting her customers' payments.
- For reasons we do not need to explain, Cordelia has made herself ineligible for any other kind of employment.
- Cordelia's tree requires no maintenance, and her property experiences no wear and tare as a result of her business.
- Cordelia's business is not taxed.

2. The Scene:

Dr Sarah Blenkinsop has worked for many years in Portland. Last Summer, while Sarah was on vacation in a remote region of Eastern Oregon, she began to think about relocating - the silent music from the canopy of silver belled stars, the smell of sage bush, the dry moaning wind upon her cheeks, and the peace, the Zen like tranquility of the place, combined to make her the willing hostage of a dream. For the first time in years, Sarah's soul sang.

When Sarah returned home, she carefully considered the feasibility of moving to Eastern Oregon. Sarah's research was meticulous. Before she made her decision, Sarah called on a friend (Bede), who taught economics at that well known ivory tower on the

Columbia, the Scappoose Institute of Technology (SIT). Lubricated by a fine bottle of Burgundy, the couple mulled over Sarah's research. Towards the end of the evening, Bede drew the following diagram which summarized Sarah's predicament.



As you can see, Sarah's ATC curve lies above her demand curve. This sad condition suggests that Sarah would make a loss if she moved to Eastern Oregon - something Sarah will not tolerate. Bede told Sarah that there was at least one way that she could make the move and more than cover her ATC. What did he suggest?

Additional information and suggestions:

1. There is no competing physician in the community, and this place is really remote.
2. There is nothing missing from the diagram - Bede based his reasoning on this diagram.
3. There is nothing that Sarah can do to change either the demand for her services or her production costs - thus neither subsidies nor tax breaks, nor any other assistance from an outside agency is an option. **You must accept the diagram as it stands** - there's nothing you need add to it.
4. Write your paper as an essay; it should contain an introduction, a logical structure, and a relevant conclusion. You should keep in mind that I do not like being taken hostage on a scenic detour—stay relevant.

Sample of Web activities given:

1. Visit the Open Market Operations page of the Federal Reserve Web site.
 - What is the current target for the federal funds rate?
 - How has the target for the federal funds rate changed over the past year?
 - What do you think the Fed has been trying to do with the changes in the federal funds rate over the past year?

2. Visit the Web site of Professor Robert Sahr at Oregon State University and find data on the pay of members of Congress in 1900, 1950, and 2000. Also find the CPI for those years.
 - Calculate the real pay of members of Congress in 1900 and 1950 in terms of 2000 dollars.
 - In which of these years did Congress members receive the highest real earnings?
 - In which of these years did Congress members receive the lowest real earnings?

3. Visit the IMF's World Economic Outlook database and obtain data on growth rates of real GDP per person for the United States, China, South Africa, and Mexico since 1990.
 - Which country has the lowest real GDP per person and which has the highest?
 - Which country has experienced the fastest growth rate since 1990 and which has experienced the slowest.
 - Explain why the growth rates in these countries are ranked in the order you have discovered?

4. Visit eBay.
 - What is eBay? How does it work?
 - Do you think the price of the items traded on eBay are determined by demand and supply or in some other way? Explain your answer.

Perfectly Competitive Markets: Production and Costs

Write your answers on a separate sheet of paper. **Staple** this sheet on top of the others.

1. Find the marginal product for each worker. Sketch the production function. Explain why the curve rises at a decreasing rate.

N	TP	MP
0	0	
1	10	
2	18	
3	24	
4	28	
5	30	

2. Complete the following table:

Q	TC	FC	VC	AFC	AVC	ATC	MC
0	300						
1	350						
2	390						
3	420						
4	450						
5	490						
6	540						

3. Using the data in problem 2, answer the following questions:
(When asked for a cost, specify *which* cost you chose.)
 - a. If 5 units are produced, what is the cost of producing a typical (average) unit?
 - b. How much of that cost is attributable to “overhead,” and how much of it consists of labor, raw materials, etc.?
 - c. How much did the firm spend to increase production from 4 to 5 units?
4. Sketch *typical* AFC, ATC, MC, and AVC curves on the same set of axes. (Do *not* plot the data in problem 2.)
 - a. Why does AFC fall continuously?
 - b. Why does ATC initially fall, and then rise?
 - c. Explain the relationship between the ATC and MC curves.
 - d. What does the distance between the ATC and AVC curves represent?

Monopoly and Other Forms of Imperfect Competition

Write your answers on a separate sheet of paper. **Staple** this sheet on top of the others.

1. Briefly describe the 3 forms of imperfect competition. Use a sketch to explain the essential difference between perfect and imperfect competition.
2. Discuss the 5 sources of market power. Which are most significant? Why?
3. Use an equation to derive the average total cost curve for a firm that has high fixed costs and low, constant marginal costs over the range of output demanded by the market (i.e., a natural monopoly). Sketch the curve. Give some examples of industries to which this curve is applicable.
4. Why does marginal revenue not equal price if the demand curve slopes down? (Use an example similar to what we did in class.)
5. Use an appropriate diagram to explain how an imperfect competitor maximizes profit. Identify the optimal output level (Q^*), the selling price, and the profit rectangle.
6. Use a sketch to explain what happens to consumer and producer surplus if a formerly competitive industry is monopolized. Indicate the deadweight loss and explain its significance. Why does the invisible hand break down?
7. Explain the alternatives for dealing with natural monopoly.
8. Use a sketch to explain marginal cost and average cost (cost-plus) pricing. Why is marginal cost pricing not an alternative for a regulated natural monopoly? What typically happens to the monopolist's production costs under average cost pricing?
9. What is price discrimination? What conditions are required for a firm to successfully price discriminate? Give a few examples of price discrimination.
10. Use a sketch to explain perfect price discrimination. Indicate the increase in profit when the firm can price discriminate. What happens to Pareto efficiency under price discrimination?

Spending and Output in the Short Run

Part 1

Write your answers on a separate sheet of paper. **Staple** this sheet on top of the others.

1. List the determinants of C, I,G and NX. What do we mean when we say that a variable is induced? Autonomous?
2. Sketch the consumption function. Use your sketch to explain each term in the equation $C = C_0 + c(Y - T)$. Derive and sketch an expression for C vs. Y. Illustrate the impact of each of the following on the consumption-income line:
 - a. a stock market boom
 - b. rising pessimism about the economy
 - c. a tax increase
 - d. rising GDP (income)
3. Using the following equations:
 $C = 1800 + 0.6(Y - T)$
 $I^P = 900$
 $G = 1500$
 $NX = 100$
 $T = 1500$
 $Y^* = 9000$
 - a. construct a table to find short run equilibrium (begin Y at 7500, and continue in increments of 500, until 9500)
 - b. discuss the behavior of inventories if $Y = 8000$
 - c. sketch equilibrium on an aggregate expenditure diagram, showing the GDP gap
 - d. solve for short-run equilibrium algebraically

Perfectly Competitive Markets: Maximizing Profit

Write your answers on a separate sheet of paper. **Staple** this sheet on top of the others.

1. Describe the characteristics of perfect competition. Why are perfect competitors price takers?
2. Define accounting profit, economic profit, and normal profit. What does zero economic profit mean?
3. Suppose that a mechanic, currently earning \$35,000 per year, decides to open his own repair shop. He invests his savings of \$40,000, currently earning 5% interest, in new capital equipment. At the end of the first year, his accountant congratulates him on earning a profit of \$36,520. Should he open a bottle of champagne?
4. Complete the following table:

Q	P	TR	TC	Profit	MR	MC	M π
0	\$500		\$1000				
1			1200				
2			1350				
3			1550				
4			1900				
5			2300				
6			2750				
7			3250				
8			3800				
9			4400				
10			5150				

5. Use the table above to answer the following questions:
 - a. What level of output should be chosen to maximize profit? How much profit will the firm earn?
 - b. Explain *why* profit is maximized at the output level where MR = MC.
 - c. What do we mean by marginal profit, and why does it equal zero when profit is maximized?
 - d. If the price increased to \$550, what level of output should be chosen? (Note: It is not necessary to redo the entire table to answer this question.) How much profit will the firm earn?
6. Explain profit maximization using a graph. Clearly indicate the profit maximizing level of output, the average cost of a unit, the average profit per unit, and the profit rectangle. Repeat for a firm making a loss.
7. Suppose the price in the table above falls to \$450.
 - a. Find the optimal level of output. Indicate the amount of profit or loss.
 - b. At the optimal level of output, find ATC. Does the price cover ATC?
 - c. Now find AVC. (Hint: Find VC first by subtracting fixed cost from total cost.) Does the price cover AVC?

- d. If the firm is unable to reduce its costs, what should it do in the short run? In the long run?
8. Use a sketch to explain why a firm's short-run supply curve is that portion of its marginal cost curve that lies above AVC. Where does the short-run market supply curve come from?

Financial Markets and International Capital Flows

Write your answers on a separate sheet of paper. **Staple** this sheet on top of the others.

2. What is the purpose of financial markets? Explain the types of financial markets.
2. Discuss the three determinants of a bond's interest rate. If an investor wants to sell a bond, what determines its price?
3. How would each of the following events affect the price of a 20 year bond from XYZ corporation:
 - a. XYZ's consolidated financial statements were audited by Arthur Anderson (the same firm that audited Enron)
 - b. interest rates on 20 year government bonds fall
 - c. capital gains taxes are reduced
4. Suppose that you buy a \$10,000 bond with a coupon rate of 4.5% that matures in 3 years. At the end of the second year you decide to sell the bond. At that time, bonds with similar risk pay interest of 5%. What is your bond worth?
5. Give an example of a capital inflow. A capital outflow. What do we mean by a net capital inflow (KI)?
6. Explain why a trade deficit must be matched by a net capital inflow of equal value.
7. Use a sketch to show how net capital inflows are related to the return on domestic assets. What happens to the curve if foreigners perceive increased risk in owning American assets?
8. Use a sketch to illustrate the advantages of opening an economy to capital inflows. What are the potential disadvantages?
9. Show algebraically that a nation's trade balance is determined by the difference between domestic saving and domestic investment. Why is it plausible that a low-saving nation with an abundance of investment opportunities (like the U.S.) will have a trade deficit and a net capital inflow?

Spending and Output in the Short Run

Part 2

Write your answers on a separate sheet of paper. **Staple** this sheet on top of the others.

4. Suppose that investment spending increased by \$100 billion. Assume that the $MPC = .9$. Show the first 3 rounds of spending. Using the simple Keynesian expenditure multiplier, predict the total change in real GDP. How much of the total change is induced consumption?
5. Explain why the simple Keynesian expenditure multiplier overestimates the true value of the multiplier. Derive a more reasonable value assuming that households save 5% of their disposable income, the nation spends about 14¢ of every additional dollar on imports, and the government takes about 30¢ of every additional dollar in taxes.
6. Using the multiplier value derived in question 5, find the government expenditure required to close a recessionary gap of \$240 billion. Illustrate using an aggregate expenditure diagram.
7. Repeat question 6, but find the tax cut necessary to close the recessionary gap.
8. Explain how the Fed controls short-term nominal interest rates through open market operations. How do open market operations affect long-term rates? How do Fed decisions about nominal rates affect the real interest rate?
9. Sketch the Fed's policy reaction function. Explain its slope and the factors that would shift the reaction function.
10. Use an aggregate expenditure diagram to explain how monetary policy can be used to close:
 - a. a recessionary gap
 - b. an expansionary gap
11. Discuss the complications in using monetary and fiscal policy.